Under the shadow of the global financial tsunami: exploring employee work attitudes during economic recession in Hong Kong

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Under the Shadow of the Global Financial Tsunami: Exploring Employee Work Attitudes during Economic Recession in Hong Kong

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June 2014
Statement of Original Authorship

I, CHENG Siu Ying, certify that the substance of this thesis has not already been submitted for any degree and is not currently being submitted for any other degree.

I also certify that to the best of my knowledge, any help received in preparing this thesis and all sources used have been acknowledged in this thesis.

CHENG Siu Ying
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Abstract

This research project focuses on general employees’ work attitudes in Hong Kong during the Global Financial Tsunami of 2008 (GFT). Employee work attitudes have long been regarded as key indicators of employee work behaviours and are studied by human resources managers in an attempt to streamline individual and organisational performance. Apart from social and cultural factors, environmental elements also have very strong impacts on people’s attitudes, and therefore, on worker attitudes as well. For example, the dramatic decline in economic and business environments caused by the GFT may have greatly influenced employees’ work attitudes and had impacts on their behaviours in the workplace in turn.

This study of worker attitudes and behaviours in the context of the GFT enabled a unique model to be developed. The framework for this model, named by the researcher as the ‘GFT Work Attitudes Model (WAM)’, covers three environmentally-related factors: belief about the damage due to the GFT, organisational decline, and organisational downsizing. These three factors were presumed to function as independent variables which would impact on employee work attitudes. It further explored the impact of these variables on intervening variables as identified by Elizur (1984) and, in turn, their impacts on six dimensions of employees’ work behaviours as defined by Lankau and Scandura (1996), considered as dependent variables.

A new methodological approach was adopted for the study. The data collection method developed and denominated by the researcher as ‘mail survey assisted by multi-level dispatchers/collectors approach’ was not a characteristic of previous studies on the theme. This method has adopted the idea of ‘multi-level marketing’ or ‘relationship marketing’. In some aspects, it is similar to ‘referral marketing’, which means a relationship marketing plan that stimulates referrals, and is built on the principle that the best way of marketing is to get the customers involved in the marketing process (Buhler & Nufer, 2010). In other words, existing informants found new informants to fill in the questionnaire. The underlying concept of this technique is similar to that underlying the Chinese concept of guanxi, which relies on a special type of relationship underpinned by friends and acquaintances for attaining a specific personal or business purposes. Inspired by such marketing techniques, the researcher was able to make the data collection process more efficient and effective.

In addition, for measuring all negative and positive work attitude variables/items in this project, the researcher developed a modified 7-point Likert scale with a range of (-3, -2, -1, 0, +1, +2, +3), which is different from that of a regular scale of 1 to 7. The purpose of the special scale was to meet the negative/positive nature of the ‘attitude variables’. In compliance with the modified scale, an instrument with two symmetrically oppositely-connected triangles was also developed to display a better visual effect for measuring the degree of negativity or positivity of worker attitudes in the study.

In handling the collected data, a number of statistical tools were used. For example, the application of means, frequencies, and paired-sample T tests were used for descriptive statistics, and factor analysis, Pearson’s correlation matrix, partial correlation, simple regression and multiple regressions were used for inferential statistics. Other appropriate descriptive and inferential methods or techniques were also applied in the analyses, such as testing the assumption of equivalent variance: F-max.
All in all, this research not only identified the relationships among the three specially selected environmentally-related factors of the GFT with worker attitudes and behaviours, but also explored the degree of negativity or positivity of general employees’ work attitudes in Hong Kong relating to their six dimensions of work behaviours during the economic downturn in the time of the GFT.
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**Abbreviations**

AC  Affective Commitment  
AMWAY  American Way (an American company using multi-level marketing model)  
ANOVA  Analysis of Variance  
BFT  Belief about the damages of the Global Financial Tsunami  
CC  Continuance Commitment  
C&SD  Census and Statistics Department  
GDP  Gross Domestic Product  
GER  Global Economic Research  
GFT  Global Financial Tsunami  
G20  Group of 20 major economically powerful nations  
H1  Hypothesis One  
H2  Hypothesis Two  
H3  Hypothesis Three  
H4  Hypothesis Four  
H5  Hypothesis Five  
HK  Hong Kong  
HKEX  Hong Kong Exchanges and Clearing House  
HKSAR  Hong Kong Special Administration Region  
HR  Human Resources  
HRM  Human Resources Management  
HSBC  Hong Kong and Shanghai Banking Corporation  
HSI  Hang Seng Stock-Index  
ITL  Intention to Leave  
JDI  Job Descriptive Index  
JI  Job Involvement  
JS  Job Satisfaction  
JW  Job Withdrawal Intention  
KMO  Kaiser-Meyer-Olkin Measure of Sampling Adequacy  
MLR  Multiple Linear Regression  
MPF  Mandatory Provident Fund Scheme  
MPS  Master Pay Scale  
MSA  Measure of Sampling Adequacy  
NYSI  New York Stock-Index  
ODC  Organisational Decline  
ODS  Organisational Downsizing  
PCA  Principal Components Analysis  
PO  Person-Organisation Value Congruence  
R&D  Research and Development  
RM  Relationship Marketing  
SPSS  Statistical Product and Service Solutions (Software)  
UK  United Kingdom  
USA  United States of America  
WAM  Work Attitudes Model
Terms and Definitions

For easy understanding of the context of this paper, the most widely used terms and key words describing the conceptions and structure of the model in this study are briefly defined as follows:

(1)  
**General employees**: Employees in general, implying various types and different levels of employees in Hong Kong.

(2)  
**Global Financial Tsunami (GFT)**: A new term to describe an unprecedented financial crisis which originated in the United States shortly after the collapses of Lehman Brothers and a number of investment banks as well as financial institutions in September 2008.

(3)  
**Economic recession**: The U.S. National Bureau of Economic Research formally defines a recession as three consecutive quarters of falling real gross domestic product (GDP). However, broadly defined, a recession is a downturn in a nation or a region's economic activities.

(4)  
**Work attitude**: An expression of an individual’s viewpoint, standpoint, stance, feeling or opinion towards work.

(5)  
**Work attitude object**: An object can be anything: people, animal, material, place, structure, event, or behaviour. In this context, it is about a work-related object being focused and reflected by people’s attitude in the domain of work.

(6)  
**Work value**: People’s cultural and ethical norms, beliefs and goals established in the domain of work.

(7)  
**Beliefs**: In this context, beliefs constitute one of the main attributes of attitudes.

(8)  
**Memory based attitudes**: Attitudes can be memory-based; that is, they can be developed by retrieving stored evaluation from memory on the basis of the experience of pleasure or displeasure.

(9)  
**Retrospective study**: A study of past events.

(10)  
**A Modified Likert Scale**: Attitudes are usually measured by degrees of negativity and positivity. In order to match that, the values from 1 to 7 on a regular Likert Scale have been modified to become whole numbers from -3 to +3 (i.e., -3, -2, -1, 0, +1, +2, +3).

(11)  
**Organisational decline**: This generally means a continuous downturn of organisational performance; that is, suffering from diminishing revenues as well as shrinking market share.

(12)  
**Organisational downsizing**: This generally refers to a reduction of the personnel or the manpower size and re-design of the workflow in the organisation.

(13)  
**Sample attrition**: A substantial part of the sample may move away and lose touch with the researchers between the waves of data collection, or original informants may withdraw due to losing patience in successive stages of data collection.

(14)  
**Guanxi**: A widely comprehended term in Chinese meaning the kind of personal relationship that can increase convenience when processing certain tasks.
(15) **Respondents:** In the context of this research, this term is equivalent to informants as well as participants of the survey in this research project.

(16) **Survey forms:** This means individual copies of the questionnaire.

(17) **Survey errors:** There are four main types of errors in survey research: sampling errors, sampling-related errors, data collection errors, and data processing errors.

(18) **Environmental factors:** The elements or things, derived from the surrounding conditions and circumstances, which are able to affect the development of living things or people and groups. The events happening in the world and human society affecting individuals are termed big environmental factors, and those happening in a single organisation are termed small environmental factors.
CHAPTER 1
INTRODUCTION TO THE RESEARCH STUDY

1.1 Introduction

Naturally and logically, people may generate and store unfading memories after experiencing an unprecedented incident, or a critical event in their lives, such as encountering a global financial crisis and suffering a heavy loss. Normally, people may react and respond to environments in an evaluative fashion (Albarracin et al., 2005), and they may also form certain kinds of attitudes towards the objects associated with such events after they happen. Hence, based on studying people’s attitudes with regard to the particular time period of an event, researchers may predict how people will respond to the said event or crisis (Albarracin et al., 2005; Berkowitz, 2000). In this research, the relationships between events, attitudes, and behaviours in the domain of work are subjected to study. Within the context of this thesis, the particular event referred to is the phenomenon of the Global Financial Tsunami (GFT) and its influence on people’s attitudes. The attitudes referred to are employees’ work attitudes in the time period of the financial crisis, and finally, the behaviours referred to are employees’ work behaviours predicted by their relative work attitudes. In other words, this research examines the relationships among the event, attitudes and behaviours under the conditions of the economic downturn known as the GFT.

1.1.1 Chapter Objective and Chapter Structure

Since this is the beginning chapter, its objective is to concisely present an overview of the research project initially by introducing the chapter structure, the thesis topic, the field of study, and the research rationale in this section, meanwhile depicting the research background in Section 1.2, the research objectives in Section 1.3, problem statements and research questions in Section 1.4, justification of the research in Section 1.5, and the successive Sections from 1.6 to 1.9 covering the research model and a brief literature review, an introductory research methodology and discussion of limitations, and finally concluding with a summary of the chapter. The outline of this chapter is given in Figure 1:
Figure 1: Structure of Chapter 1

1.1 Introduction
   1.1.1 Chapter objective and structure
   1.1.2 Background of this thesis topic
   1.1.3 Field of study
   1.1.4 Rationale for the study

1.2 Environmental Background to the research
   1.2.1 Eruption of the GFT
   1.2.2 Concept of economic recession under the GFT
   1.2.3 Uniqueness of Hong Kong social security system

1.3 Objectives of the research

1.4 Problem statements / research questions/hypotheses

1.5 Justification of the research
   1.5.1 Originality & research gap
   1.5.2 Contribution to knowledge & organisations

1.6 Research model & a brief literature review

1.7 Overview of the research methodology

1.8 Research limitations

1.9 Summary of the chapter
1.1.2 Background

According to the Oxford Japanese-English dictionary, the term tsunami comes from the Japanese 津波, and is made up of the two kanji (2 Chinese characters) 津 (tsu) meaning ‘harbour’ and 波 (nami), meaning ‘wave’, a reference to tidal waves generated by undersea earthquakes.1 Doubtless, a tsunami is a major catastrophe with destructive power bigger than many other natural disasters. People therefore adopted this term to describe the unprecedented worldwide financial catastrophe in September 2008. The GFT has caused immense damage to the world’s overall economy, and especially to the economies of developed countries in Europe and North America. As a matter of fact, the Hong Kong Financial Market has also been badly hurt by the GFT. The impacts of these adverse economic and organisational situations on people’s work attitudes and their work behaviours is the subject of this study.

This topic was also partly inspired by a study by Selmer and Littrell (2004) on the effects of the Asian Financial Crisis in 1997-1998 on work values. Their research examined the changing importance of work values during that period of economic adversity using 24 variables. The Asian Financial Crisis and the GFT were somewhat similar economic crises; however, this research investigates the work attitudes of employees under the conditions of the GFT by adopting the same set of their variables which were originally developed by Elizur (1984) as work attitude objects. This research has a sample size (n=562 employees of various fields and levels) much bigger than Selmer and Littrell’s model (n=31 managers) so as to create a better representation and a wider spectrum of study of the general workforce during this economic downturn in Hong Kong. Employees’ work attitudes towards their work behaviour, which were affected by the worsening environmental and organisational conditions, will be the focus of this research. Even though ‘work values’ and ‘work attitudes’ are similar in certain aspects, they are, of course, quite different things indeed. So, this research differentiates ‘work attitudes’ from ‘work values’ to create a topic of added uniqueness in the hope of developing a totally new model.

1 https://en.wikipedia.org/wiki/Tsunami
Chart 1: Conceptual Association between Tsunami and Financial Crisis

Tremendous damages resulted from the devastating tsunami in Japan on 11 March 2011
(Source: NHK, Japan)

Lehman Brothers’ headquarters in New York and the chart showing the big downturn of activities in the U.S. security market after the eruption of the Global Financial Tsunami in September 2008.
(Source: Thomson Reuters)
1.1.3 Field of Study

It could be argued that studying either ‘work attitudes’ or ‘work values’ is directly related to the study of employees’ work behaviours. Within any organisation, the human resources professionals or the personnel practitioners inevitably have a very strong interest in the area of ‘work attitudes’ in connection with employees’ work behaviours. In essence, because human resources are regarded as being of paramount importance in any organisation, understanding human behaviour in the workplace has been an indispensable issue for human resources management (HRM). Ferrett (1994) argues that attitude is the key to success at work, and employees with positive attitudes are invaluable to the organisations of today. Work attitudes can surely be regarded as the perfect stepping stones for predicting employees’ behaviour in the workplace. Therefore, employees’ work attitudes can be regarded as good indicators for human resources managers to foresee employee behaviours and performance as well. Based on measuring employees’ work attitudes, management is able to project and formulate human resources policies and strategies for streamlining the system of the organisation. No one can deny the truth that organisational functions and operations always begin with the factor of human resources. Without them, no organisation can survive. Hence, studying work attitudes is important and effective for human resources management, and in turn, an effective HRM system is crucial to the success of an organisation.

The development of HRM can be traced back to its origin, scientific management, theorised by Frederick Taylor (1911), an engineer who believed that a high increment of productivity in factories could be achieved by applying a scientific approach in the industrial sector of the United States. In his book, called *The Principles of Scientific Management*, he laid great emphasis on efficient workplace environments and appropriate selection and training of employees so as to attain the goal of improving productivity of organisations (Hodson 2001). With this background, HRM is now regarded as a major branch of management. Somewhat similar to the discipline of HRM, organisational psychology also covers most of the contents of HRM. Thus, from the perspective of human resources professionals and personnel practitioners, the literature from the discipline of organisational psychology and even its parent,
By using the field of HRM, managers can more easily maintain a harmonious workplace in their organisation. By focusing on the area of employees’ work attitudes, management can have an effective indicator of personnel evaluation to promote the organisation’s progress (Somers & Birnbaum 2001). This is simply because those employees’ behaviours are mostly derived from their relevant work attitudes.

Figure 2: Field of Study (Connection between 2 disciplines)

This also shows the connection between work values and work attitudes.
(Source: Developed for this research)
1.1.4 Rationale for the Study

To achieve a higher academic level in the field of business management is the common goal of many managerial elites. In the commercial and industrial arena, managers have to be equipped with up-to-date business management knowledge and good human resources skills in order to survive and surmount the challenges of the fast-changing global environment. Uncertainty and instability of social conditions are detrimental to business development. Only an effective and efficient management of the human resources factor can smoothly alleviate an adverse situation in such environments. In order to attain an organisational goal, managers should study work behaviours, and management needs to have a good understanding people’s work attitudes. In short, the rationale for conducting this study has two levels. That is, exploring people’s work attitudes can give business practitioners or researchers an insight into the employees’ behaviours so as to attain organisational growth on one level and achieve a higher academic standing for personal growth on the other level. To conduct a work-attitudes study relating to the critical time period of the GFT can explicitly test people’s reactions when they were encountering critical social situations of adversity. Also, by studying the implications of people’s attitudes, feelings and expressions in such a difficult time in Hong Kong’s economy, the researcher may contribute to the government’s understanding of possible precautionary measures to prepare for another cyclical economic downturn in the future.

In particular, the researcher was most interested in investigating employees’ work attitudes in response to the world financial crisis from its eruption in September 2008 through to September 2009, and its aftermath up until September 2010. This financial crisis was unique. It was not considered just a financial storm. Rather, it was regarded as a financial tsunami because its destructive power was overwhelming. For example, the collapse of the investment banker Lehman Brothers on 17 September 2008 made history as the biggest bankruptcy to have occurred in U.S. history, with the company losing a record US $691 billion in deteriorating assets. In the same month, Washington Mutual suffered the same fate on 25 September 2008 and became the biggest traditional bank failure in U.S. history (CNN News, 2008). In addition, in the
same year, 81 public financial corporations in the United States went bankrupt. Even worse, as reported in *The Wall Street Journal*, a slow-down in funding for venture capital had negative effects on employment and job creation. According to the front-page commentary of the Chinese newspaper *People’s Daily* on 18 September 2008, Lehman Brothers’ bankruptcy announcement would not only have a domino effect on the global financial markets, but also would bring a shock to the world economy.

These reports were borne out as the GFT affected vast populations as well as large number of organisations globally. Before the GFT, there were only short-term cyclical recessions in Hong Kong, and its major trading countries were mostly not involved. But all of Hong Kong’s trading partners were heavily affected by the GFT, so that its economic ‘life-support’, the export trade, dropped sharply by 25.9 percent in March 2009 compared to the same period in the preceding year of 2008 (Hong Kong Census & Statistics Department 2009). People expected a long period of suffering and anticipated big losses in the local job market. The labour force statistics released on 19 May 2009 by the Census and Statistics Department (C&SD) showed an unemployment rate increase (seasonally adjusted) from 5.2 percent in January–March 2009 to a provisional figure of 5.3 percent in February–April 2009, just a month later. Over the same period, under-employment increased from 2.1 percent to 2.2 percent (provisional figure). People had no doubt that the local job market would further worsen. Those who still remained in their jobs faced possible salary cuts or benefit reductions. The *Standard*, a local newspaper, revealed on 16 June 2009 that a 5.38 per cent pay reduction from 1 July 2009 for top officials and political appointees would be approved in the Executive Council’s meeting on that day. Likewise, senior civil servants had their salaries reduced by the same margin. In the private sector, the waves of pay cuts and benefits reductions would inevitably grow bigger and bigger.

Intuitively, the researcher observed that employees’ worries and stresses were also growing, and that this would be reflected in their work attitudes. Understanding more about the general workforce in the timeframe of the GFT, which is the aim of this project, makes a valuable contribution to both business studies and social research.
1.2 Environmental Background to the Research

1.2.1 Eruption of the GFT

Because there had not been a worldwide financial crisis previously, there were no theories or specific definitions for dealing with the GFT before its actual eruption in September 2008. As mentioned, the term refers to the common perception that a tsunami is an extremely powerful catastrophe, causing more damage than a seasonal storm. Like a tsunami, the GFT affected many countries and large populations, as well as an incalculable number of enterprises and organisations worldwide. In the Hong Kong financial market alone, more than 48,000 local investors suffered heavy losses due to holding Lehman’s products. For more than three years following the GFT, many Lehman victims were still protesting with banners at the entrances to several major banks in the financial district of Hong Kong (See Figure 3).

In fact, the GFT was mainly a critical liquidity crisis derived from the subprime mortgage problems in the U.S. financial market, which have been regarded as the originator of the GFT. To understand this, it is important to understand the differences between a subprime mortgage and a prime mortgage. Whereas prime mortgages are ordinary loans given to people with good credit, with the expectation that the loan will be paid out on time, subprime mortgages are mostly given to people with low credit rating and income. Because these subprime loans are associated with a higher risk, they incur a higher rate of interest. Lenders, all of which are financial institutions, bundle these subprime mortgages and sell them on to investors. The investors are attracted by the fact that these repackaged loans generate more financial benefits than an ordinary mortgage (Griffin 2008). Regardless of the high risks of the subprime markets, many financial institutions were chasing a market share in the hope of attaining lucrative snowball profits without any consideration of professional ethics. In fact, things were not always ideal. Unfortunately, the delinquency of loan repayments finally caused a number of financial institutions to go bankrupt. Lehman Brothers declared bankruptcy in September 2008, creating a domino effect on world financial markets. This was considered to be the catalyst for the GFT.
According to a report called *Export Outlook* published by the Hong Kong Trade Development Council on 15 December 2008, the world economy had been on the brink of recession prior to the eruption of the GFT. Developments following the sudden announcement of bankruptcy of Lehman Brothers on 17 September 2008 demonstrated the fact that the financial crisis in the U.S. was not over by any means. Europe was next to feel its effects, then it rapidly spread around the world. Many governments tried to head off the crisis by injecting capital, and various other rescue efforts, but the crisis did not abate (See Figure 3).

Thanks to the efforts of the G20 meeting in Washington, D.C. on 11 October 2008 to bring about cooperation in order to stabilise the world financial markets, some signs of mild improvements were seen globally in the middle of 2009, resulting from remedial financial policies formulated by G20 countries to stimulate their own economies. Of those countries, China had substantially achieved better outcomes than any other economy. Notwithstanding some degree of economic improvement, the Chinese Premier Mr. Wen Jiabao told Xinhua News Agency on 27 December 2009 that the GFT was not over yet (The Standard, 28 December 2009).
Figure 3: Advertisement of the ‘Alliance of Lehman Brothers Victims’

(Loosely translated from the Chinese, this advertisement is a request to the Hong Kong Government to make the ‘Lehman Investigation Report’ available to the public. It is also appealing for a big rally in the financial district to claim compensation from agent-banks on 27 October 2011. The victims wanted to find out the whereabouts of their HK$3.05 billion investments, and also to ask for intervention from the Chinese leaders of the Central Government in Beijing.)
1.2.2 Concept of Economic Recession under the GFT

In literature concerning the concept of recession, economists usually apply the theory of a ‘business cycle’ to explain movements in national incomes, unemployment, prices, production, balance of payment and profits as well as governments’ financial policies and foreign factors influencing the ups and downs of the national economy. Each cycle moves between a trough and a peak then back to the trough again. The peak is a point that implies the end of economic expansion and the beginning of a recession. Even though it is a recurrent trend, the duration and intensity of each fluctuation varies (Salvatore et al. 2003). According to Samuelson (1976), a mixed economy is still subject to occasional recessions.

Another theory also closely related to theories about economic recessions is known as the theory of a ‘bubble economy’. As per Rutherford’s description (2007), a bubble occurs when the prices of an asset or commodity increase unsustainably to a level that is different from their fundamental values because speculators expect prices to rise further. Bubbles occur in bullish markets and can be fuelled by fraudulent schemes, thereby leading to the recent collapses of a large number of financial institutions in Wall Street of New York City. Thus, bubbles burst through the announcement of bad news; for example, Lehman Brothers declared bankruptcy in September 2008, which resulted in a financial crisis in which thousands of investors suffered heavy wealth losses, eventually plunging the national economy into recession in the U.S.

Generally, as defined by The U.S. National Bureau of Economic Research, a recession is indicated by a fall in real gross domestic product (GDP) for three consecutive quarters. As a result, it can be broadly thought of as a downturn in economic activity. A rise in unemployment, a decrease in consumption and spending by business, and falls in stock prices typically follow.

As reported in the New York Times in September 2008, the United States Department of Labour revealed that the U.S. unemployment rate rose to 6.1 percent. Not only was this the highest in five years, but also the report predicted that the rate would continue to rise (Grynbaum 2008). In the final quarter of 2008, the Hong Kong economy was also officially reported to be sliding into recession (Chan 2008). Unemployment
reached an all-time high of 4.8 percent, the property market lost over 40 per cent of its value, and the Hang Seng Stock Index lost over 60 per cent of its value (Chan, J. 2008). Twenty-one days before the Lehman bankruptcy was declared on 17 September 2008, the Hang Seng Index was 21,464.72 (27 August 2008); but 40 days after the declaration, the Hang Seng Index dropped to 11,015.84 (27 October 2008), thus representing a loss of 10,448.88 points in just two months (statistical figures from HKEx, the Hong Kong Exchanges and Clearing House). It would appear that people totally lost confidence in the local financial market and the economic situation in Hong Kong. Unfortunately, the world economy continued worsening in 2009 as the United States unemployment rate rose to a record height of 10.1 per cent, while Hong Kong also reached 5.4 percent in December of the same year (Global Economic Research, and the Census & Statistics Department of Hong Kong. Dec. 2009). There was hardly any good news during this recession. Indeed, John Tsang, the financial secretary of Hong Kong, announced the worst ever 7.8 per cent drop of local GDP on 15 May 2009 in Hong Kong’s Headline Daily the following day. A survey of 2,100 small and medium enterprises in seven districts conducted by the HSBC during the period from March to April 2009 reflected the pessimism about the local economy, as reported on 4 June 2009 in The Headline Daily. Then, on 3 July, The Metro News reported the fact that, with poor consumption prospects, retail sales had dropped sharply by 6.2 per cent in May 2009. On the whole, it can be said that the economic recession in Hong Kong was directly influenced by the GFT, which originated in the tremendous credit crisis of the financial market in the United States.

After enormous government interventions and financial bail-outs, the U.S. economy showed some signs of slight improvement in the fourth quarter of 2009. But the unemployment rate had already reached the record height of 10.1 percent in December 2009. Even though it subsequently dropped by 0.1 percent to 10 percent in January 2010, the economic recovery was still far away in the U.S. (Trading Economics, NY 18 January 2010). Traditionally, Hong Kong’s economy is somewhat affected by the American financial data since the United States is the largest foreign market for Hong Kong’s export trade. According to the trade figures reported by the Hong Kong Trade Development Council (2008), the first quarter of 2009 recorded the lowest level of import and export trade, mainly owing to the downturn of the U.S. market. Hence, it is apparent that Hong Kong usually depends on the U.S. market to a
considerable degree. Under such a close trading relationship between Hong Kong and the United States, it is necessary to maintain a stable foreign exchange situation and prevent the local currency from fluctuating in the money markets. As a result, since 1983, the Hong Kong Government has pegged the Hong Kong dollar at the rate of 7.8 Hong Kong dollars for one U.S. dollar (Wikipedia, 27 February 2010). Therefore, any change to American financial policies as well as the movements of the New York stock markets would inevitably have an impact on our economy. With this kind of relationship, we can hardly see a solid business recovery in Hong Kong unless the U.S. economy first obtains a significant improvement.

1.2.3 Uniqueness of Hong Kong’s Social Security System

Having discussed the origins of the global financial tsunami and relative economic recessions in the previous sections, we can now see that, under such adversities, the most affected people are the general workforce. In particular, the middle and lower level working classes faced financial problems and poorer living conditions. Many unemployed people needed assistance from social welfare.

Referring to the social welfare system of Hong Kong, Tang (1993) has argued that, because Hong Kong is neither a developing nor industrialised economy, an applicable model does not exist. As Sawada (2004) points out, the social security system in Hong Kong has been somewhat similar to a liberal welfare state regime. This author goes on to say that the social welfare system has shown years of high economic growth, changes in conditions in the labour market, and significant change in the political environment. Nevertheless, he points out, the system has kept the fundamentals of a social welfare system, with the private sector being involved. Sawada (2004) also holds that the laissez-faire attitudes from colonial times are still having an effect. The system provides minimum social insurance, so that people will be discouraged from depending on welfare and encouraged to work. In recent years, the government has seen the problems of an ageing population, growing retirements and unemployment and so it introduced the Mandatory Provident Fund Scheme (MPF), which requires citizens to join the scheme provided in the private sector. Thus, the government can leave the burden to the individual citizens themselves.
Unlike most Western nations, Hong Kong has lacked an adequate social security system to protect people’s livelihood when they are unemployed on account of organisational decline or downsizing. Nevertheless, there is a temporary assistance program called a ‘Self-reliance Scheme’ sponsored by the Social Welfare Department. The stated aims of the program are to encourage people who are unemployed or earning less than a prescribed amount in part-time work to work towards full-time employment, yet the program provides minimal financial assistance, and the requirements are tough. Not all unemployed people are eligible to enroll in this scheme. In fact, it is almost impossible to help people get a full-time job, especially during an economic recession. Thus, job security is a major concern for ordinary working people. In otherwords, ‘job insecurity’ was one of the most important themes for regular employees in Hong Kong and regarded as a factor affecting the majority of employees’ work attitudes and behaviours. According to Shoss (2017), job insecurity reflects a threat to the continuity and stability of employment that have left many employees insecure about the future of their jobs. Any sign of economic slow-down will cause worry and anxiety among the workforce, especially for lower level job holders. In periods of recession, they are quite sensitive about any possible organisational changes, even if there are no immediate announcements about layoff actions from the management.

As a matter of fact, these conditions in Hong Kong’s social security system have been in place, unchanged, for a considerable length of time. Rather than being a sudden phenomenon like the GFT, Hong Kong’s social security program has been a constant factor regardless of any changes in the economic environment. Hence, this system is considered to be a social-background factor for reference only as it always exists and has no direct relation with the GFT. But, because most working people do not benefit from this system, general employees are mostly concerned about keeping their jobs at any time but especially during periods of economic recession in Hong Kong.
1.3 Objectives of the Research

The main objective for conducting this research is to examine the impact of the global financial tsunami on employees’ work attitudes and work behaviours. Specifically, the researcher focused on the relationships among employees’ beliefs about the extent of damages caused by the GFT, organisational decline and downsizing and their impact on work outcomes, i.e., employees’ work attitudes and work behaviours. Besides, the objective for this study is also to achieve a constructive business research project as well as a social research project with benefits for the business sector and society as a whole.

Building a new ‘Work Attitudes Model (WAM)’ based on the events of the ‘Global Financial Tsunami’ is the central objective of this research. The study of employees’ work attitudes will not only help to improve the understanding of employees’ behaviours in the workplace but will also help raise their work morale, which is particularly important in an economic downturn, especially under the shadow of the GFT. After such a study, the management of an organisation may develop strategies to deal with the adverse environmental situation. The other objective was that the research would also apply to cyclical economic recessions in the context of Hong Kong. Generally speaking, the focus of the model is an exploration of the relationships between the work attitudes and work behaviours of employees in the context of environmental and organisational phenomena in periods of economic adversity. Six dimensions of work behaviour are considered in this model, namely: job satisfaction, job involvement, affective commitment, continuance commitment, P-O value congruence, and ‘job withdrawal intention. Of these six dimensions of work behaviour, job satisfaction, job withdrawal intention, affective commitment and P-O value congruence will be emphasised. More importantly, this research also expects to ascertain how the general workforce feels about the impacts of the global financial tsunami on their working status and conditions in their organisations and in society as a whole. Therefore, certain implications of the research findings may help private-sector managers to streamline HR strategies in their organisations and public-sector officials to formulate labour and welfare policies for social stability in Hong Kong.
1.4 Problem Statements and Research Questions Relating to Hypotheses

Based on the research objectives as defined in section 1.3 above, the research questions, problems and related hypotheses are discussed below.

The Research Questions

Conceptually, a research question is a prototypical, epistemic and referential question when it seeks contextual information about situations, events, actions, purposes, relationships, or properties (Kearsley 1976). To some extent, research questions refer to what issues and phenomena are under study so that such research questions best state the objective of the research study. Prior to the development of a set of questions, the sources of information relating to the existing theories on this topic, a thorough review of the literature on human resources management and organisational psychology, personal briefs and practical experiences as well as interest in this immediate discipline of ‘work values and work attitudes’ were already in place. The main issue has been identified as involving employees’ work attitudes in the conditions of economic recession resulting from the sudden onset of the GFT in 2008.

In view of the abovementioned situations, a number of questions may be raised. For example: Do you know how negative or positive the general employees’ work attitudes were toward the six dimensions of work behaviour (i.e., job satisfaction, job involvement, affective commitment, continuance commitment, P-O value congruence, and job withdrawal intention) during the GFT in Hong Kong? Do you know how negative or positive employees’ work attitudes were toward other work behaviours in their workplaces during this difficult time in Hong Kong? To what extent is people’s affective commitment related to personal and organisational value congruence when encountering an adverse situation in organisation? Do you know of any differences in employees’ work attitudes toward certain work behaviours among people of different gender, age groups, and job levels? Other questions relating to comparisons among employees’ demographic, attitudinal, and behavioural characteristics could also be raised. All such questions can be included in the area of micro study that requires detailed analysis item by item. However, in consideration of time and other resource
constraints, this research is a macro study, and is mainly about the major features of employees’ work attitudes.

The following are the research questions:

1. Do the environmentally related factors of the GFT (Belief about GFT damages, Organisational decline, and Organisational downsizing) influence employees’ work attitudes?

2. Under the shadow of the GFT, do employees’ work attitudes influence their related work behaviours?

3. Do the environmentally related factors of the GFT (Belief about GFT damages, Organisational decline, and Organisational downsizing) influence employees’ work behaviours through the formation of the work attitudes of employees?

4. Under the shadow of the GFT, is there any association between the attitudinal variables of ‘job satisfaction’ and ‘job withdrawal intention’?

5. Under the shadow of the GFT, is there any association between the attitudinal variables of ‘affective commitment’ and ‘P-O value congruence’?

6. What kinds of contributions are possible from the study of employees’ work attitudes in this project to knowledge, to organisations and to society?

The Hypotheses

The hypotheses of this study are basically derived from the above questions and are eventually turned into statements describing the key relationships between those variables of interest. Generally speaking, the research hypotheses are therefore defined based on the investigation of the linkages between phenomena of the GFT, employees’ work attitudes, and employees’ work behaviours. Testing the relationships among such variables in the time period of the ‘global financial tsunami’ is the main reason for the following hypotheses:

H1. Environmentally related factors of the GFT do not influence employees’ work attitude.

H2. Under the shadow of the GFT, employees’ work attitudes have no influence on their work behaviours.

H3. The relationship between environmentally related factors of the GFT and employees’ work behaviours is not mediated by work attitudes.
H4. Under the shadow of the GFT, there is no association between the attitudinal variables of ‘job satisfaction’ and ‘job withdrawal intention’.

H5. Under the shadow of the GFT, there is no association between the attitudinal variables of ‘affective commitment’ and ‘P-O value congruence’.

With regard to Research Question 6, there is no need to formulate a particular hypothesis for testing because analysis of the test results from the above five hypotheses and their implications could give answers to this research question. Further, the answers may also be given in the concluding chapter.

As mentioned in the previous paragraphs, hypotheses development is logically derived from the relevant research questions.

1.5 Justification of the Research

1.5.1 Originality and Research Gap

It is widely known that ‘work values’ or ‘work attitudes’ have been comprehensively studied in both industrial psychology and business management (Adkins & Russell 1997; Alas & Wei 2008; Allen et al. 2001; Lankau & Scandura 1996; Mobley 1982). Thus, studies on work values or work attitudes and related issues can easily be found in the relevant literature. In many cases, researchers focus on the investigation of the work values or work attitudes on a specific group of subjects, such as government employees, managers, minority groups or women (Selmer & Waldstrom 2007; Somers & Birnbaum 2001). A few researchers have studied changes in work values during a period of economic downturn, for example, Selmer and Littrell’s study (2004). So, the existence of many studies in the fields of ‘work values’ and ‘work attitudes’ does not mean that there are no more gaps available for further study. A comprehensive search of ‘attitude’ articles found no similar research studying the issue of the work attitudes of the general workforce in Hong Kong in association with an economic recession especially under the shadow of the GFT. Even though the terms ‘work values’ and ‘work attitudes’ are sometimes applied interchangeably by researchers to measure work behaviours (Adkins & Russell 1997; Allen et al. 2001; Ambrose et al. 2008; Li et al. 2008; Prottas 2008; Selmer & Littrell 2004; Selmer & Waldstrom 2007; Somers & Birnbaum 2001), it should be emphasised that work
attitudes, in fact, differ from work values in many aspects. But there seems to be little research comparing ‘work values’ and ‘work attitudes’. Hence, this research also tends to distinguish the differences between these two key variables relative to employees’ work behaviours. Nevertheless, there is a grey area. With respect to the aforesaid factors of the GFT, a research gap is evident, and a new model is constructed based on specific phenomena that reflect the work attitudes of employees in such peculiar economic and business environments under the shadow of the ‘global financial tsunami’. This research examines the impacts of economic and business environments on employees’ attitudes towards work behaviours and tests the degree of employees’ negative or positive moods, emotions and feelings in their workplaces.

This research can be justified on the following grounds:

1. The ‘Global Financial Tsunami (GFT)’ was unprecedented and totally new to everyone.
2. The linkages between the GFT, employees’ work attitudes, and work behaviours are interesting and meaningful for an academic and business study.
3. Similar research was not found in a search of ‘attitudes’ articles in a number of academic databases.
4. Special outcomes are expected for this topic under the GFT.
5. It will make organisations and society aware of the attitudes and expressions of the general workforce in Hong Kong during the period of the worst financial crisis that has ever happened worldwide.

1.5.2 Contribution to Knowledge and to Organisations

*Work values* or *work attitudes* can influence employees’ behaviours (Costa et al. 2003). Work values are mostly regarded as positive (Ford & Richardson 1994), but, on the other side of the coin, work attitudes may be negative or neutral or positive (Mobley 1982; Mowday et al. 1982). Having considered that work attitudes can influence employees’ behaviours in response to job elements, Trewatha and Newport (1979) argue that work attitude surveys are needed for management to better understand employees’ feelings toward decisions and policies before implementation. Furthermore, they believe that work attitude surveys can improve the level of trust
and support between the organisation and its members. Hence, the results of this survey study are expected to be a contribution to organisations in Hong Kong.

Academically, this research mainly deals with work attitudes and is designed to test the negative side and also the positive side of employees’ responses toward work in the time of the GFT. It is also expected to explore the connections between differences of gender, age groups, and social class on work attitudes in Hong Kong from September 2008 to September 2009 and the GFT’s aftermath in 2010. Some social researchers may have undertaken similar demographic studies in other periods of economic downturn, but they may not have explored the same issue in this particular economic recession under the shadow of the GFT.

Additionally, this researcher expects to develop a unique model strictly for the study of employees’ work attitudes associated with the impacts of the GFT. To meet this purpose, a number of new tables, charts, diagrams and even a new idea of data collection have been introduced to study work attitudes and their relationships with other relevant factors. Meanwhile, the Likert Scale has also been modified to suit the nature of negativity and positivity in this newly designed model.

With such an innovative approach, this research will generate additional knowledge of work attitudes to the field of human resources management in the following areas:

**Crisis Management** – This kind of research may suggest to organisations that it is possible to observe the general work attitudes of employees of different levels (not just a specific segment of the workforce) for the formulation of crisis strategies for organisational survival. This can be done through the survey study of employees’ attitudes in order to enhance an effective two-way communication channel for disseminating crisis programs about organisational resource savings, departmental budget cutting and special motivational plans to promote positive work attitudes during times of financial adversity.

**Manpower Planning** – The results of this kind of research may suggest to human resources managers what types of employees should be retained or laid off after measuring their work attitudes in the time of economic recession. From a human
resources manager’s perspective, it is important to understand the causes, structure and functioning of work attitudes toward changes in the environment. Among many possibly important reasons, two stand out. First, employee reactions may be predicted by means of some HR interventions. Secondly, an HR manager, guided by such understanding, could better strategise to minimise any negative responses to HR interventions, and maximise the talents and abilities of employees in an organisation.

**Public Awareness** (about the general feelings of the working classes in our society). The results of this kind of research may also reflect the common expressions of different working classes in respect of their degrees of frustration, stress, anxiety, and worries about their job status in the workplaces during the period of economic recession under the shadow of the GFT. Acting as one of the barometers for testing social stability, this survey research may possibly generate information for the reference of the relevant government authorities or agencies to further understand work-related social phenomena in our society. From business management’s perspective, this research may also enhance the prediction of important individual and organisation behavioural outcomes. In addition, calling for organisations to have social responsibilities and ethical values in respect of the fair treatment of employees and avoidance of unnecessary layoffs will be suggested by the results of the survey, which in turn will increase public awareness about the common feelings, moods and needs of the employees in their organisations during times of cyclical economic recessions in Hong Kong.

**Ethical Concerns**—Being an advocate of a soft HRM approach that encourages organisations to treat their employees better and fairly, the researcher has placed ethical concerns in an important position, which can be seen also in the conclusion chapter. However, in an economic downturn, many organisations may face a dilemma about solving their imminent financial problem or considering ethical issues and thus refraining from cutting those workers of low productivity. The researcher believes that struggling for the survival of the corporation and the livelihood of the overall employee population could be the highest priority for many human resources practitioners. So, a very difficult decision will need to be made by the management. The researcher suggests that the number of layoffs should be made as low as possible, and that the unwanted workers should be compensated by the employers, at least
meeting the lowest threshold set by the labour law. It is unavoidable that certain employers always find a loophole in the law to avoid and escape from their full responsibilities. The government should check and fill such loopholes as well as enforce the relevant law at any time.

1.6 Research Model and Brief Literature Review

The research model of this project is simply a construct of three kinds of variables: (1) independent variables on an *environmental basis* – ‘belief about the damages from the phenomena of the GFT’, ‘organisational decline’, and ‘organisational downsizing’, (2) intervening/mediating variables on an *attitudinal basis* – 27 work situations are used as employees’ work attitude objects to reflect work attitudes, and (3) dependent variables on a *behavioural basis* – there are six dimensions of employees’ work behaviours. Figure 4, further developed in subsequent chapters, serves to illustrate the linkages among these three types of variables.

![Figure 4: Research Model](Source: Developed for this research)

1.6.1 Brief Literature Review:

Before pursuing the study of work attitudes, work values, and work behaviours, a fuller discussion of the disciplines of *human resources management* and *organisational psychology* is warranted in the following chapter. Both disciplines have their common practices in dealing with the human resources tasks. As pointed out by Landy and Conte (2007), these include recruitment, selection, retention, training, and staff development aimed at the achievement of personal and organisational goals. In this research, the literature review focuses not only on work attitudes but also on their close relationship with work values, on attitude and value
variables relating to motivation theories, and further tracing back to their parent disciplines of psychology and management science.

**Employee Motivation**

The motivation function of an organisation begins with the study of employees’ work attitudes so as to predict work behaviours, and in turn generate work stimulus as well as incentive plans and programs. In general, the work climate determines whether prescribed behaviour patterns will satisfy the needs of individuals while accomplishing the organisational goals at the same time. In an attempt to attain both, two concerns become apparent (Trewatha & Newport 1979):

1. Are all employees’ attitudes basically similar if the same incentives are applied across the board?
2. Does the management have resources to determine the active, basic needs for each employee?

In answering these questions, a need-behavioural study should be undertaken by referencing the ‘Hierarchy of Human Needs’ theory of Maslow (1987) and the ‘Two-Factor’ theory of Herzberg et al. (to be illustrated in Section 2.3).

**Values and Work Values versus Attitudes and Work Attitudes**

The motivation of humans is linked to their values and attitudes towards needs, both of which are basic psychological elements for measuring human need behaviours. Rokeach (1973, p. 5), a famous theorist who devoted much time to studying human value systems, defines a value as “an enduring belief implying a specific mode of conduct or end-state of existence being personally or socially preferable to an opposite or converse mode of conduct or end-state of existence”. However, Hollander (1971) argues that attitudes are people’s beliefs about specific objects or situations. Logically, in the domain of work, people’s individual values and attitudes relative to the workplace become work values and work attitudes. Further discussion in respect of the above key factors will be found in Chapter 2.
1.7 Overview of the Research Methodology

This study does not expect to perform a longitudinal comparative study of work value variables between different time periods of an economic downturn. Selmer and Littrell (2004) experienced big losses in the number of respondents in their second period of measurement. Theirs study was a longitudinal three-panel, cross-cultural study. The data set for their initial panel included 115 ethnic Chinese managers employed by local companies in Hong Kong. As a conventional longitudinal panel design was used, it was intended to measure the same individuals three times over the time period. However, owing to a high employee turnover rate over the measurement period because of the difficult times in Hong Kong, the number of respondents decreased to only 31 managers by the end. That was a major shortcoming for measuring changes of work variables during times of economic recession with such a small sample size in their quantitative study. However, this project is a cross-sectional study of the general workforce of Hong Kong investigating their degree of negative and positive ‘work attitudes’ toward six dimensions of work behaviours with a bigger sample of employees in response to events of a particular time period which, like the outbreak of the GFT, caused a big economic recession in Hong Kong at that time.

In sum, this research explores the causal relationships among the GFT-related factors, work attitudes and work behaviours. A quantitative approach is adopted using a survey questionnaire to collect data. Unlike a traditional mailed survey, the questionnaire forms of this survey were mainly sent to respondents by a number of direct dispatchers. Measuring techniques including descriptive statistics, correlation analysis and multiple regression analysis were applied.

1.8 Research Limitations

Regardless of the type of research undertaken, certain limitations cannot be avoided. For example, Selmer and Littrell’s (2004) longitudinal study of changing work values during economic adversity had a small sample size (n=31) limitation owing to panel attrition in times of poor economic performance. But, this research with its cross-sectional approach, only measures work attitudes in respect of a particular period of
time of the GFT. So, its main limitation is that no comparison can be made to the situation under different economic conditions. That is, general employees’ work attitudes toward certain work behaviours in a booming economy cannot be available for comparison in this study. Another limitation is the sampling structure, as the design is not based on a purely random sample. Even though sample units are not selected on the basis of the researcher’s personal judgment, intention, preference or will, the sampling process can only be regarded as a semi-probability sampling method and not a probability sampling design.

Moreover, the retrospective survey study is also a salient limitation as using people’s recollections to measure past events may not be effective enough. Even though the impacts of the GFT still exist, the best time for direct measurement of such impacts may be in the midst of the crisis. The limitation concerning generalisation of the research results must be acknowledged. This is because the findings in the Hong Kong context may not suitably be applied in other countries. The last limitation is the lack of sufficient funds and manpower for conducting an even more comprehensive study with a sample size of above 600.

1.9 Summary of the Chapter

Chapter 1 provides an introduction and overview of this research project with respect to the interrelationships among the factors of the global financial tsunami, employees’ work attitudes and employees’ work behaviours. Therefore, this chapter has outlined the field of study, the rationale and environmental background to the research, its objectives, problem statements, research questions and hypotheses. In addition, it has clearly stated the justification for doing this project, outlined the research model and given a brief overview of the relevant literature. The methodology and limitations of the research have also been briefly described. However, certain theories, key terms and definitions of the overall literature review and further discussions about those terms will be presented in the following chapters.
CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

Chapter 1 presented an overview of the research study. However, beginning from this chapter, a much more detailed discussion on each of the main concepts and theories relevant to the overall research topic will be carried out. Therefore, the parent discipline of this research, the conceptual as well as the fundamental behavioural variables of human values and attitudes, and particularly the core variables of work values and work attitudes together with their attributes and key elements as well as the environmentally related factors, will be illustrated. Meanwhile, a systematic development of the three stages of the basic research model will be presented. The interrelationships between all these variables, elements, factors, and the research hypotheses will also be explained in the sections of this chapter.

2.1.1 Chapter Objective and Chapter Structure

The objective of this chapter is to search for relevant theories in the field of study that fit the topic of this research, and to help in the creation of new concepts and the formulation of strategies. The structure of this chapter is represented in Figure 5.
Figure 5: Structure of Chapter 2

2.1 Introduction
2.1.1 Chapter objective and structure

2.2 Main area literature / parent discipline
2.2.1 Human resources management vs. organisational psychology
2.2.2 Overview of values, attitudes, attitude objects and beliefs
2.2.3 Differentiation of attitudes from values
2.2.4 The influence of environments on attitudes
2.2.5 The influence of beliefs on attitudes
2.2.6 The influence of attitudes on behaviors

2.3 Immediate literature / work literature
2.3.1 Work values versus work attitudes
2.3.2 Work value variables versus work attitude variables
2.3.3 Work behaviours and work attitude objects
2.3.4 Work attitudes influence work behaviours
2.3.5 Organisational decline and organisational downsizing with work attitudes

2.4 Independent variables
2.5 Intervening variables (Mediators)
2.6 Dependent variables

2.7 Research model

2.8 Development and formulation of research hypotheses
2.8.1 Hypothesis one
2.8.2 Hypothesis two
2.8.3 Hypothesis three
2.8.4 Hypothesis four
2.8.5 Hypothesis five

2.9 Summary of the chapter
2.2 Main Area Literature / Parent Discipline

2.2.1 Human Resources Management versus Organisational Psychology

The main area of literature of this study has its roots in the combination of the disciplines of ‘management’ and ‘psychology’. In the 1920s and 1930s, students of management in organisations began to take a more in-depth interest in the human factor. As a result, ‘human relations’, a new phenomenon concerned with the relationship between employees and their work environment, developed into what is now termed ‘human resources management’ (HRM) (Trewatha & Newport 1979). Extensive research into understanding human behaviour in different work situations began to be carried out by scholars such as Elton Mayo and F.J. Roethlisberger (1979).

Since the 1930s, expansion in the knowledge base of human resources management has been due to insights borrowed from the disciplines of psychology, and also sociology and anthropology, which have added significantly to the knowledge of human resources management. Similarly, the concentration of organisational study in psychology became a new field known as organisational psychology.

*Human Resources Management*

As mentioned, Frederick Taylor (1911) published his book *Principles of Scientific Management* early in the 20th century, describing techniques to standardise work activities to achieve maximum efficiency of effort and time by means of a ‘time and motion’ study. Since then, business management has become a field of social science, while the discipline of management has been gradually developed into several major branches. Personnel management is one of them. To meet the fast-changing business environments, personnel management has transformed into the new discipline of ‘human resources management’ (HRM).

In this respect, Collings and Wood (2009) have defined the functions of HRM as (1) recruitment and selection, (2) HR planning, institutions, strategy, tools and techniques,
(3) performance management, (4) reward management, (5) human resources development, and (6) industrial relations and human management.

**Organisational Psychology**

According to Hodson (2001), organisational psychology has been defined by Carlson (1988) as a branch of psychology involved in industry that advises management about the application of psychological principles to running a business’ and by Riggio (1990) as the branch of psychology that is concerned with the study of behaviours in work settings and the application of psychological principles to changing work behaviours. According to another similar definition by Landy and Conte (2007), concepts and research from social psychology and organisational behaviour have combined to give rise to the discipline of organisational psychology. Because of this, organisational psychology focuses on the emotional and motivational aspects of work. It includes topics such as fairness, motivation, stress, leadership, teamwork, organisational and work design and, most importantly for the present study, attitudes. In fact, organisational psychology is similar to industrial psychology or I-O psychology or work psychology or even business psychology about human relationships in the workplace, but in the United Kingdom, it is called occupational psychology instead (Doyle 2003; Landy & Conte 2007; Perrott 1999). Regardless of the different names, the components are basically the same.

According to Doyle (2003), work and organisational psychology is primarily concerned with paid employment and often with people who work for large or medium-sized organisations. This discipline aims to understand and explain the behaviour and experience of people at work by applying theory and research methods from psychology. Doyle (2003, pp. 17-25) also lists the scope of its functions as: (1) human-computer interaction, (2) design of environments and of work, (3) personnel selection and assessment, (4) performance appraisal and career development, (5) training, (6) counseling and personal development, (7) employee relations and motivation, and (8) organisational development and change.

By way of contrast, Perrott (1999) has defined business psychology as a study all about human relationships in the workplace, and its scope converges on creating high-
performance work environments to bring about optimal job performances so as to make business results leap to new heights. Landy and Conte (2007, p. 9) have identified the areas of industrial and organisational psychology as (1) selection and placement, (2) training and development, (3) organisational development, (4) performance measurement, (5) quality of work-life, and (6) engineering psychology.

Many of the above practices and functions have also been widely adopted by the field of human resources management in various organisations, although the approach has been criticised for presuming that financial rewards are of prime importance. So, they are often referred to as the ‘stick and carrot’ philosophy. With the fast changes to economic and business environments in recent years, organisational psychology now concerns itself with all kinds of organisations and is applied to both blue-collar and white-collar settings. Since it locates the relationships between employees and management at its centre, the theories and practices of organisational psychology are now also applied to other settings such as the military units, voluntary agencies and sports teams, and even non-Western settings of organisations with cultural differences (Hodson 2001).

From the above literature review, there is no doubt that the theories and practices of organisational psychology and even the discipline of psychology can offer a lot to human resources management. Within the contexts of the aforementioned disciplines, the following sections will focus on the discussions of values and attitudes, and their influences on human behaviour.

2.2.2 Overview of Values, Attitudes, Attitude Objects and Beliefs

Understanding the concepts of values and attitudes at present can be considered the stepping stone for studying work values and work attitudes at a later stage. However, it is important to study the definitions of ‘values and attitudes’ and the distinctions between them in the first place. All these concepts are the fundamentals in the review of the literature under the subject topic of this research project.

*The Definition of Values*
From a vast amount of literature concerned with understanding values, two main trends can be identified: what they are, and what function they fulfil for individuals, organisations and societies. In defining what values are, theorists have formulated various explanations and typologies of their characteristics. To begin with, Hofstede (1984, p. 19) defines a value as “a broad tendency to prefer certain states of affairs over others”. A similarly broad view is offered by Super (1970), who defines values in terms of objectives as something that people aspire to reach, either as a psychological state, or as pertaining to relationships or material circumstances. Roe and Ester (1999) continue this idea when they explain that, in thinking about values, it is important to discriminate between what values mean for different levels in society. For example, they will differ in relation to a particular country, group, or individual. Yankelovich (1981) expands this idea further by claiming that in an agricultural society, for example, values might be more focused on material things, whereas, in an industrial society, success in accumulating material goods might be highly valued. He goes on to say that, in a welfare society, these values have been re-focused with a greater emphasis on a sense of individual fulfilment. Ravlin, Adkins and Meglino (1989), for example, mention specific social characteristics involved in values, such as “fairness, honesty, achievement, and helping and concern for other people” in their paper at the academy of Management Annual Meeting in August 1989.

However, one characteristic most frequently mentioned in definitions of values is belief. Rokeach (1973, p. 5), a theorist dedicated to studying value systems, defines a value as “an enduring belief implying a specific mode of conduct or end-state of existence being personally or socially preferable to an opposite or converse mode of conduct or end-state of existence.” In addition, values are shaped by personal belief and developed through study, inspection and consultation with others and a lifetime of experience (George, 2003). Several authors associate the idea of culture with belief. Beliefs are closely related to individual and cultural identities, because they represent the sense of what is right and wrong, or desirable in society (House et al. 2004; Page 1970).

With regard to how beliefs function in society, they work to identify what is good or bad, beautiful or ugly, morally acceptable or inacceptable, and normal or abnormal (Pucik et al. 1993). The normative function of values in society is also a common
theme in the literature. Cultural norms are built on values, which in turn enable people to make appropriate choice to further individual and social freedom, prosperity and security (Alas 2006; Parsons 1951; Gini 2004). Schwartz (1999) sums up this idea by defining values in society as “desirable states, object, goals, or behaviours, transcending specific situations and applied as normative standards to judge and to choose among alternative modes of behaviour”. He goes on to explain that “the cultural dimensions of values reflect the basic issues or problems that societies must confront in order to regulate human activity, to motivate action, and to express and justify the solutions chosen” (pp. 23-47).

However, most important for this study is the link that some authors make between values and attitudes. In defining values, Pattison, Hannigan, Pill and Thomas (2010, pp. 13-14) state that values are crucial in underpinning an understanding of the world, and therefore, attitudes and actions that follow from it. They further identify several specific functions that values can perform as follows:

1. Values legitimise actions and organisational arrangements;
2. Values help coordinate actions;
3. Values can be used to discipline/help manage people;
4. Values justify change—and resistance to change; and
5. Values help create and consolidate identity.

Ros, Schwartz and Surkiss (1999) build on this idea by theorising in terms of motivations being based on values. They have identified ten different motivations based on values (see Appendix I). The three guiding principles underlying these motivations concern the biological needs of humans, the requirements of smooth social interaction, the survival of groups in society. According to these authors, their typology of motivations based on values explains the importance of attitudes and behaviours in constituting entire value systems.

In fact, the values system involves many other factors, i.e., culture, attitudes, beliefs, behaviours, ability, and diversity, as mentioned by Rothmann and Cooper (2015 pp. 29-33). Generally, they hold that values are among the most stable and enduring characteristics of individuals and are the basis on which attitudes and personal
preferences are formed. They further explain that values are kinds of organisational culture and types of individual beliefs.

**The Definition of Attitudes**

The most common definition given for attitudes is that it is a psychological phenomenon that informs value judgements based on favourability or unfavourability towards entities in the physical and social environment (Eagly & Chaiken 1993). People’s attitudes towards such entities involve their cognitive, emotional, and active responses to them (Eagly & Chaiken 1993; Zanna & Rempel 1988). Importantly, LeBreton et al. (2004) regard individuals’ personalities as predictors of attitudes as well as behaviours.

Alternatively, attitudes are explained as judgments that are influenced by external information, the memory of past judgments, and prior knowledge as well as the storage of new judgments; thus, attitudes can be judgments, or memories, or both (Albarracin et al. 2005). The study of attitudes includes both the judgments that individuals form online (Schwarz & Bohner 2001) and the evaluative representations in memory (Fazio 1986). Furthermore, the traditional judgment theory suggested by Anderson (1981) is that attitudes could be reflected on a memory-based explanation, that is, by retrieving stored evaluation from memory on the basis of the experience of pleasure or displeasure.

Oppenheim (2001, p. 174) introduces an important aspect of an attitude when he describes it as equivalent to “a state of readiness, a tendency to respond in a certain manner when confronted with certain stimuli”. In this light, it is logical to expect that individuals’ attitudes would be significantly modified by exposure to those of co-workers and members of other organisations with whom they interact in the course of conducting business in meetings and information exchange. (Weiss & Nowicki 1981).

Among other researchers concerned with attitude, Lines (2005) explains that the magnitude of an attitude can vary. The relative strength of an attitude can be thought of in terms of how important an object is to an individual, regardless of whether the attitude is positive or negative. The importance of this observation is that the
relationship between an attitude and an attitude object. It follows from this that, in the case of low strength, for example, an attitude may not be activated by an encounter with the object to which it is associated. Conversely, Lines points out that in the case where a strong relationship has been identified between an attitude and an attitude object, that attitude will be almost always activated by that particular attitude object. Further discussion on the ‘work attitudes’ will be found in a later section.

The Definitions of Attitude Objects and Beliefs

As well as being thought of in terms of relative strength, attitudes can be thought of as an overall evaluation of the attitude object (Lines 2005). It follows that how an individual feels about an object will equate with that individual’s evaluation of it (Albarracin et al. 2005). Furthermore, consideration of some or all of the attributes of an attitude object will inform the individual’s attitude (Thompson & Hunt 1996). These attitudes, as pointed out by Oppenheim (2001), normally lie dormant until activated by perceiving the related attitude object and demonstrated by certain speech or behaviour. Theoretically, attitude objects can be everything including persons, things, other living things, situations, events and behaviours.

In this study, Elizur’s 24 work values (1984) are applied as attitude objects to test employees’ work attitudes in the time of the GFT. Ajzen and Cote (2008) conclude that most social attitudes are acquired, not innate. People are not born with positive or negative attitudes toward certain objects of interest, but rather, exposure to a variety of objects, actions and circumstances will inform the acquisition of beliefs. Exposure, furthermore, can be direct and self-generated, or indirect, in the case of receiving information from an outside source. From these formulations, it could be argued that attitudes could, again, be equated with beliefs (Albarracin et al. 2005). However, it should be admitted that emotions, as well as beliefs, may contribute to attitude formation (Lines 2005). Therefore, in this research, employees’ beliefs about the damage caused by the GFT are assumed to drive and influence the formation of employees’ work attitudes about certain work attitude objects under study.
Similarities and Differences between Values and Attitudes

By comparing the definitions of ‘values’ with ‘attitudes’ from the works of a number of theorists, the researcher has discovered that ‘attitudes’ resemble ‘values’ in certain aspects. Most commonly, both ‘values’ and ‘attitudes’ share the same attribute of ‘belief’. For example, Hollander (1971) constructs his definition of attitudes as being equivalent to beliefs about specific objects or situations. Rokeach (1973) also uses both terms when he reflects that, in a hierarchy of beliefs, attitudes are low on the list. Furthermore, individual attitudes are related systematically to certain variables covering beliefs, values, personality and past behaviours (Costa & DeMatos 2002).

Roe and Ester (1999), however, claim that there is a major difference between values and attitudes. Whereas attitudes can be positive or negative, values are by definition positive as guiding principles, norms and standards described previously in the context of the literature review (Adkins & Russell 1997). Values may be viewed differently by different groups of diverse cultural or religious backgrounds; for example, Christians and Muslims see each other’s values as heretical in certain aspects. Another difference is that values usually can change very slowly but attitudes can change at a faster pace.

From all the above-mentioned concepts and definitions of values and attitudes, it can be clearly understood why Costa and DeMatos (2002), George (2003), Hollander (1971), Oppenheim (2001), House et al. (2004) and Rokeach (1973), have included the common element of ‘belief’ in their accounts of ‘values’ and ‘attitudes’. From the perspective of Ajzen’s ‘expectancy-value approach’ (2001), beliefs, values and attitudes are interdependent. In Ajzen’s view, belief is the most salient factor that can influence both value and attitude even though they are two different things.

In reviewing the literature, the researcher found no systematic comparison of ‘value’ and ‘attitude’ because those theorists who study ‘values’ only focus on the attributes of ‘values’, and those who study ‘attitudes’ only concentrate on the attributes of ‘attitudes’. In view of this situation, the researcher has integrated the concepts of various theorists of ‘values’ and ‘attitudes’ to develop a new diagram (see Figure 6) describing the linkages and similarities between these key variables. Moreover, a
table (see Table 1) showing their differences has also been made and will be discussed in the following section.

This researcher developed the diagram portrayed in Figure 6 (p. 38) by integrating various ‘attitude’ and ‘value’ theories and definitions from articles and books of different scholars mentioned above. The purpose of this diagram is mainly to show the linkages between ‘value’ and ‘attitude’ with their relevant elements. Because these two variables have so many attributes, the above-mentioned diagram can only cover the key elements in the context of the literature review.

Besides the above illustrations, please also see Section 2.2.3 Differentiation of Attitudes from Values and Section 2.3.1 Work Values versus Work Attitudes for further information.
Figure 6: Formation of Values, Attitudes and Behaviours (From the Review of Literature)

Source: (Developed for this research and integrated with Campbell et al. (1970)’s 3P work behaviour model (p.56).

Note:  
* Values are always positive.  
* Attitudes can be positive or negative.  
* Attitudes which fall into the domain of work become ‘Work Attitudes’.
2.2.3 Differentiation of Attitudes from Values

It is necessary to clearly distinguish ‘attitudes’ from ‘values’ (see Table 1) because this research topic mainly focuses on the study of employees’ attitudes that are wholly derived from general attitudes in the domain of work. Again, in this study, Elizur’s 24 work values (1984) are applied as attitude objects to test employees’ work attitudes in the time of the GFT.

Table 1: Major Differences between Values and Attitudes are as follows:

<table>
<thead>
<tr>
<th>Values</th>
<th>Attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Always exist</td>
<td>(1) Initially dormant</td>
</tr>
<tr>
<td>(2) More on cultural &amp; ethical norms.</td>
<td>(2) More on personality of individuals.</td>
</tr>
<tr>
<td>(3) Emphasis on conducts.</td>
<td>(3) Emphasis on judgments.</td>
</tr>
<tr>
<td>(4) Having an objective for attainments.</td>
<td>(4) Having an object to be perceived.</td>
</tr>
<tr>
<td>(5) Always positive, especially viewed by own group.</td>
<td>(5) Ranging from negative through neutral to positive.</td>
</tr>
<tr>
<td>(6) Can change slowly.</td>
<td>(6) Can change rapidly.</td>
</tr>
<tr>
<td>(7) Less affected by stimuli.</td>
<td>(7) Easily affected by stimuli.</td>
</tr>
<tr>
<td>(8) Slightly affected by environmental change.</td>
<td>(8) Heavily affected by environmental change.</td>
</tr>
<tr>
<td>(9) As guiding principles in people’s lives:</td>
<td>(9) As the key to understand human behaviours:</td>
</tr>
<tr>
<td>Kluckhohn, 1951; Rokeach, 1973, had same view that values were desirable, trans-situational goals that vary in importance as guiding principles in people’s lives.</td>
<td>Thomas &amp; Znaniecki (1918) &amp; Watson (1925) advocated that social psychology was originally the scientific study of attitudes based on the assumption that attitude was the key to understanding human behaviour.</td>
</tr>
<tr>
<td>(10) Other Attributes and Elements: rightness, fairness, honesty, achievement, motivation, concern for other persons etc.</td>
<td>(10) Other Attributes and Elements: emotions, information, observation, evaluation of a particular entity, etc.</td>
</tr>
</tbody>
</table>

(Source: Developed for this research)
2.2.4 The Influence of Environments on Attitudes

Certain environmental changes in our society affect individuals’ attitudes toward a particular behaviour regardless of whether the information perceived is negative or positive. Individuals are always concerned about organisational changes derived from various economic or business conditions in our social and environmental context. With reference to Salancik and Pfeffer’s study (1978), it can be understood that the processing of social information influences attitudinal development, and attitudes towards change itself. This is affirmed by Lines (2005), who holds that the attitude towards change is a vital factor in the process of change. Lines goes on to explain how an initial encounter with a significant change in the environment can elicit an emotional reaction. The change from a thriving economical environment in Hong Kong, followed by the depression of the GFT is a prime example. Typical of such emotions at such a time are enthusiasm, fear or frustration. Lines further argues, based on the work of Pfeffer (1981), that the relative importance of different aspects of such change can be influenced by the social environment. Moreover, the strongest influence will be wielded if most of the conversation focuses on only certain aspects of the changes underway.

Attitudes are formed not just on an individual level but also on social and organisational levels. That is, social and organisational environments can affect an individual’s attitudes. Society and the overall economy are the big environmental factors, but a single organisation can be regarded as a small environmental factor to the individual. Asch (1952) points out that individual attitudes are causally connected with group conditions and act as a part of the mutually shared field. Hence, the investigation of attitudes is at the centre of the individual’s social relations and the way in which group processes take place. As described by Lines (2005), attitude theory also acknowledges that an individual will be influenced by people and groups that are particularly significant within that person’s social environment (Fishbein & Ajzen 1975; Wood 2000). An individual’s attitudes can be influenced by bigger groups as well as larger organisations and even by worldwide environments under the overall globalisation process in our present century. In other words, an individual’s attitudes are affected not only by small environmental factors (groups or organisations)
but also by big environmental factors (the society and the world) as well, as illustrated in Figure 7.

Figure 7: Relative Environments

Elements or events, derived from the surrounding conditions and circumstances, are able to affect the development of living things or people and groups. The events that happen in the world and human society affecting individuals are termed big environmental factors, and those that happen in a single organisation are termed small environmental factors.


2.2.5 The Influence of Beliefs on Attitudes

Having perceived the conceptual development of definitions of attitude from Costa and DeMatos (2003), the researcher realised that ‘belief’ is one of the elements that can influence the attitudes of an individual. According to Kruglanski and Stroebe (2005), the answer to the question of how belief can influence attitudes depends mainly on the theory of the ‘expectancy-value models’ which are widely adopted by attitude theorists to explain the relationship between attitudes and beliefs. Their theoretical conception is about an individual’s attitude toward a given attitude object (e.g., an event, a substance, a place, a person, an animal or a behaviour), which depends on the subjective value attached to the attributes of the object or its consequences.

For example, one’s attitude toward physical exercise would be a function of the perceived likelihood with which the person expects physical exercise to have certain
consequences such as normal blood pressure or physical fitness. Therefore, expectancy-value models have been dealing with the concept that attitudes are derived from beliefs about the positive or negative features of objects, in which the features’ positivity or negativity is associated with goals and values to which individuals may subscribe. The model is articulated thus by Albarracin et al. (2005, p. 329):

When a person has a relatively stable tendency to respond to a given object with either positive or negative affect, such a tendency is accompanied by a cognitive structure made up of beliefs about the potentialities of the object for attaining or blocking the realisation of valued states; the sign (positive or negative) and the extremity of affect felt towards the object are correlated with the content of its associate cognitive structure.

In addition, Ajzen (2001) has demonstrated that the expectancy-value models concern the relative importance of different beliefs as determinants of attitude. Although people can form many different beliefs about an object, it is assumed that only beliefs that are readily accessible in memory influence attitudes at any given moment.

2.2.6 The Influence of Attitudes on Behaviours

In the early research into attitudes, most scholars accepted that human behaviours are guided by social attitudes. In fact, social psychology was equated with the study of attitudes, based on the assumption that in order to understand human behaviour, attitudes needed to be understood (Thomas & Znaniecki 1918; Watson 1925). While social psychology may have evolved to include much more than the study of attitudes, the fact remains that attitudes are excellent predictors of behaviours (Eckhardt & Ermann 1977; Oppenheim 2001). In relation to social and interpersonal issues, for example, the attitude construct according to Ajzen and Fishbein (2005) has remained a vital theoretical element that can predict social behaviours in all such social-psychological domains. Even though they appear to be abstractions, they are real enough to the person who holds them. Using the idea that attitudes are determinants of behavior, at least in some instances, Costa and DeMatos (2003) studied the impact of organisational design on the dynamic process of attitude change.
Ajzen and Cote (2008) also regard attitude an important and very useful concept for understanding and predicting human social behavior. They also draw attention to the possible range of positive and negative magnitude of an attitude, and its relationship to a psychological object. Costa and DeMatos (2003) extend the idea of a spectrum of positive or negative evaluations, based on attitudes towards objects, people, ideas or actions.

Ajzen and Cote (2008) further suggest the use of two types of attitude objects for studying the influence of attitudes on behaviours. One type is the ‘global attitudes’ that cause people to have certain feelings about the object of interest, but which do not generate a particular action in response to it. An example is the good or bad feelings about presidential candidate Obama. The other type, which is termed ‘attitude toward a behaviour’, involves a specific action or category of behaviours, namely, to vote for Obama for president. The former attitude type involves a ‘perception’ of the object but the latter results in an action in response to the object. Hence, a final voting behaviour is formed. In order to better understand the influence of attitudes on behaviours, Ajzen and Fishbein (2005) have bifurcated possible attitudes differently, towards objects on the one hand, and activities on the other. Examples of the first type, as suggested by these authors, are Yosemite National Park, or the Empire State Building (physical objects); African Americans, Jews, or gays (racial, ethnic or other minority groups); Congress, or the Catholic Church (institutions); gun control, or tax cuts (policies); and September 11, or the World Series (events). The second type is typified by behaviours such as visiting Yosemite National Park, or hiring an African American, etc. This second type is similar to the abovementioned ‘attitude toward a behaviour’.

Since ‘global attitude’ only involves a perception of the attitude object but triggers no action about the attitude object, we can explain the scenario by referring to one as antecedent and the other as an outcome as opposed to ‘attitude toward a behaviour’ that involves an action being triggered by an attitude about the object referring to one as predictor and the other as a performer.
Therefore, when applying the relationship between ‘Attitude’ and ‘Behaviour’ in this situation, we can also explain the scenario of ‘Antecedent and Outcome’ versus ‘Predictor and Performer’ with the following two examples:

**Example 1: Antecedent and Outcome**
A voter’s attitude ‘without any good or bad feeling about the presidential candidate Donald Trump’ may result in no action in such a presidential election.

**Example 2: Predictor and Performer**
A voter’s attitude 'having a good feeling about the presidential candidate Donald Trump’ may predict that this voter would perform an action/behaviour to vote for Trump.

With a wider spectrum of views, and focusing the attention on an organisational context, Costa and DeMatos (2003) note that attitudes influence behaviour, and argue that the best organisational design will be based on choosing structures and procedures that align with individual attitudes and the nature of collective goals. Although some researchers may be reluctant to accept attitudes as more than theoretical constructs, because they are derived from measured data rather than on observable phenomena, there are guidelines for assessing the appropriateness and applicability of research into attitudes in an organisational setting. Cooper and Schindler (2011, pp. 293-294) offer the following considerations that facilitate the decision concerning applicability:

1. Specific attitudes are said to be better predictors of behaviour than general ones.
2. Strong attitudes (the degree of strength is affected by accessibility or how well the object is remembered and brought to consciousness, how extreme the attitude is, or the degree of confidence in it) are better predictors of behaviours than weak attitudes composed of little intensity or topical interest.
3. Direct experiences with the attitude object (when the attitude is formed, during repeated exposure, or through reminders) produce behaviours more reliably.
4. Affective-based attitudes are often said to be better predictors of behaviours.
5. Generally, cognitive-based attitudes influence behaviours better than affective-based attitudes.
6. It is believed that using multiple measurements of attitude or several behavioural assessments across time and environments improves prediction.

7. Additionally, the influence of reference groups (interpersonal support, urges of compliance, peer pressure) and the individual’s inclination to conform to these influences improves the attitude-behaviour linkage.

Regardless of the challenges of applying these guidelines, Cooper and Schindler (2008) point out that analysis of attitudes not only offers important insights about behaviours, but also can aid understanding of past events and experience and have an impact on future behaviours.

2.3 Immediate Literature and Work Literature

Having acquired the fundamental knowledge of ‘human resources management’ and ‘organisational psychology’ in Section 2.2.1, it is time to enter into the ‘work literature’ review and in-depth discussions focusing on ‘work behaviours’ covering the key variables of ‘work values’ and ‘work attitudes’.

In the study of ‘work literature’, there are several frequently used words or terms such as variables, factors, elements, and items and so on, and presumably, in the domain of work, they become work variables, work factors, work elements and work items. When studying work behaviours, researchers should clearly define the meanings of such words or terms, otherwise confusions and doubts will arise. For example, the work variables ‘job satisfaction’ and ‘job involvement’ can be treated as ‘work values’ or ‘work attitudes’ or ‘work attitude objects’ or ‘work behaviours’, and, to some extent, they can be regarded as ‘work value variables’ or ‘work attitude variables’ or ‘work behavioural variables’. To a further extent, they can also be called ‘work value items’ or ‘work attitude items’ or ‘work behavioural items’. These terms will be applied in the context of this study. The terminology chosen depends on which issues are focused on. For example, in this research, when the objects of study are ‘job satisfaction’ (JS) and ‘job involvement’ (JI), they can firstly be called ‘JS work attitude’ and ‘JI work attitude’ and can thereafter be regarded as ‘JS work behaviour’ and ‘JI work behaviour’ being influenced by the relevant ‘JS work attitude’ and ‘JI
work attitude’ respectively. That is, in the face of a work attitude object being affected by an environmental factor, an employee’s work attitude may generate a work behaviour in the end.

The Meaning of Work

The general meaning of the term ‘work’ is obviously more than paid employment and it includes housework, do-it-yourself, unpaid caring and voluntary work (Hodson 2001). It covers also includes the research and writings of academics and the sculptures and handicrafts of artists. However, in the context of this study, the term ‘work’ only refers to ‘job’ and with a relationship between employers and employees. In our society, all adults are expected to join the labour market when they complete their education and rely on paid work for their main source of income until they retire. Ideally, full employment is hoped for in all societies, industrialised or non-industrialised. But this ideal is never attained as unemployment and under-employment frequently happen during poor economic conditions and financial crises that are mainly caused by unforeseen circumstances as well as unprecedented environmental factors. Under diverse environmental situations, employees’ work behaviours will be predicted by their ‘work values’ or ‘work attitudes’ in the workplace.

The specific meaning of the term ‘work’ is understood mostly on the basis of work-goals which are expressed as basic human values in the work setting. Work-goals, and therefore, the meaning of work can be thought of as closely related to three requirements which all individuals and societies must negotiate: (1) biological needs of individuals (2) the need to interact socially, and (3) the need for survival and smooth functioning of groups in society (Schwarz 1999; Ros et al. 1999). In summary, the real meaning of work has to do with work-goals and factors of work motivation.

Work Motivation

One of the most important areas of Human Resources Management is work motivation, and it is quite closely related to the study of ‘works values’ and particularly ‘work attitudes’. According to Doyle (2003), the majority of the 20th
The 20th century was dominated by two major management philosophies that have deeply influenced the organisation of work. These two philosophies were developed by McGregor (1960) in his contrast between theories X and Y.

Theory X was based on the belief that the mass of ordinary people are inherently: (1) lazy, (2) self-centred, (3) lacking in ambition/willingness to take responsibility, (4) resistant to change, (5) gullible and not very bright, and (6) motivated by ‘sticks and carrots’, fear of the sack and wage cuts.

Theory Y was based on the conception that people are not by nature passive and lazy but may become so because of influences from other factors. Normally, people are thought to want challenge, development, achievement, recognition, responsibility, self-direction, and will work hard to get these in the right conditions. So, people are assumed to be: (1) naturally motivated to work for goals which they value and this includes organisational goals, and (2) intelligent and capable of imagination and innovation in solving organisational problems (Doyle 2003).

Vinacke (1962) argues that ‘motivation’ determines differences in intensity, persistence, quality, and direction of behaviour. Among all the motivation theories, the ‘need theory’ introduced in 1943 by Maslow (1987), has become widely known. Conceptualising needs as being innate, Maslow proposed a specific hierarchy of needs to explain human behaviours, and how best to fulfil them. His concepts have been commonly applied in the discipline of human resources management to form work motivation theory.

The construct of Maslow’s hierarchy of needs proceeds from a lower order to a higher order, beginning with physiological needs, followed by the needs for safety, love, esteem, culminating in self-actualisation. It is assumed that, when people have fulfilled their lower level needs, they will attempt to satisfy higher level needs. In order to influence motivation, the organisation needs to know what need level at which the individual worker is operating. For example, if the organisation is offering opportunities for esteem as an incentive for hard work when the worker just needs to make enough money to feed a family, the organisation’s incentives will have very little effect on motivation.
Aside from Maslow’s approach, the ‘two-factor theory’ of Herzberg (1966) proposes only two basic needs (lower level: hygiene needs; and higher level: motivator needs), not five as argued by Maslow, and that they are hierarchically arranged and independent of one another. Herzberg also suggests that meeting the lower level needs will succeed in eliminating dissatisfaction, but it cannot be assumed that motivated behaviour or positive satisfaction will follow. However, meeting higher level needs will result in both the expenditure of effort and satisfaction.

While Maslow stresses that people’s ultimate aim or motivator is self-actualisation, McClelland (1965) suggests that individuals work to fulfill internal needs including a need for achievement. He developed his theory specifically with the workplace in mind. His study was based on interviews with people from both the private and public sectors and the public sector in countries with diverse cultural contexts. He concludes that people’s motivation at work falls into three main areas:

(1) The need for achievement, which is a basic desire to succeed and to get a task completed as efficiently as possible. Individuals will always strive for excellence and will enjoy working to achieve their goals.

(2) The need for power, which is the desire for high status. Individuals like to control the working environments.

(3) The need for affiliation, which is concerned with relationships at work and the need to be accepted as groups’ members. It involves cooperation rather than competition among workmates.

Viteles (1953) also addressed work motivation in his book, *Motivation and Morale in Industry*. Morale is the term commonly used to include work-related attitudes and the concept of job satisfaction. The notion is that the organisation makes a worker happy and the worker will reward the organisation with higher productivity in return. According to Landy and Conte (2007), to identify what work status and conditions are capable of making a worker happy or unhappy can be done by means of an attitudes survey. If the respondents to the survey indicate that their current work is boring and is making them unhappy, the organisation should use a higher interest level as an incentive for higher levels of productivity. Offering and exposing workers to more interesting work is a way to increase their motivation. In order to see the results, work
attitude measurement should be regarded as a pathway to uncovering the motivational key (Landy & Conte 2007).

2.3.1 Work Values versus Work Attitudes

Having discussed the concepts of values and attitudes, we now can link them with the meanings of ‘work’ for detailed study in this section. ‘Work values’ and ‘work attitudes’ have some aspects in common, but there are also many differences between them. The words ‘work’ and ‘job’ are similar in meaning, so the terms of ‘work attitudes’ and ‘job attitudes’ are also commonly used by researchers interchangeably (Browne 1997; Somers & Birnbaum 2001).

Definition of Work Values

First, it is important to recognise that there are differences between general values and work values. One aspect that they have in common, as stated by Elizur and Sagie (1999), is that all values have a particular cognitive structure. Roe and Ester (1999) explain that, as general values are projected onto the work domain, work values are generated. In order to come up with these observations, these researchers have considered multiple contexts such as in the fields of education, politics, culture, occupation, religion, and the family (Elizur et al. 1991; Sidani 2000).

It follows that work values can be described as being those qualities that individuals wish to achieve through their work (Ben-Shem & Avi-Itzhak 1991). In this, a connection between needs and their satisfaction can be seen (Abboushi 1990). Nord Brief, Atieh & Doherty (1990), conceptualise work goals as constituting a desired state of affairs that an individual image can be achieved through work and, as such, can guide the individual’s beliefs concerning work activities. Super (1970) also pinpoints satisfaction as being central to the definition of work values, including the idea that they entail the goals that a worker may seek to reach in order to satisfy a need. Examples could be: the need for recognition in one’s work, pride in one’s work, expectation of remuneration, or the opportunity to help others (MOW 1987). Schwartz (1999) also joins the idea of goals into his concept of work values. He
broadly classifies values into broadly into four categories, and aligns them with the core goal for each, as follows: intrinsic work values (personal growth, autonomy, interest, and creativity), extrinsic work values (pay and security), social work values (contact with people and contribution to society), and power work values (prestige, authority, influence) (pp. 23-47).

Schein (1985) confirms the fact that work values are at the centre of organisational culture, and in fact, are the guiding principles determining individual and organisational performance. It is not surprising that certain work values would be linked to Maslow’s hierarchy of needs (Selmer & Littrell 2004). At the same time, they are linked to employees’ performance and salary (Roe & Ester 1999). It therefore is logical to include the notion that work values also have an ethical dimension, which can underpin a normative system of right and wrong (Ford and Richardson 1994).

**Definition of Work Attitudes and Differences between Work Attitudes and Work Values**

A search of the literature has not revealed a comparison of ‘work values’ and ‘work attitudes’. Nevertheless, both work values and work attitudes can be used to measure certain similar types of work behaviour variables such as job satisfaction, job involvement, affective commitment, continuance commitment, P-O value congruence, and job withdrawal intention. They can also measure work behaviours even when they are associated with different issues of study (Adkins & Russell 1997; Allen et al. 2001; Ambrose et al. 2008; Li et al. 2008; Prottas 2008; Selmer & Littrell 2004; Selmer & Waldstrom 2007; Somers & Birnbaum 2001). However, derived from the perception of the definitions of ‘values’ and ‘attitudes’ in the previous section, it is logically understandable that ‘work values’ and ‘work attitudes’ have similar traits and different traits as well. For instance, work attitudes can be positive or negative or neutral, but work values are usually positive job-related expectations and norms.

To some extent, Somers and Birnbaum (2001) admit that the importance of work attitudes is to integrate all employees into the organisation. Work attitudes have consistently been regarded as an important component of both the process and the outcome of effectively managing workforce diversity (Lankau & Scandura 1996).
Work attitudes are also directly tied to positive outcome variables such as employee retention (Mobley 1982), and negative outcome variables such as absenteeism (Mowday et al. 1982).

Ambrose, Arnaud and Schminke (2008) argue that the influence of person-organisation fit (P-O fit) on job attitudes is based on both individuals’ ethical orientations and organisational ethical attributes. Alternatively, P-O fit is developed by matching individual and organisational ethics cognition and this in turn strongly affects the moral behaviours and attitudes of employees at work.

Although many theorists contribute additional concepts to define work values and work attitudes, they do not contradict each other’s definitions. They also develop different interpretations to explain the relevant variables leading to a point of eventual convergence. In short, the variables of either work values or work attitudes are all culturally related factors derived from beliefs, ethics, norms, justification and personality. Work values are always deemed as positive, rightful and justifiable, especially viewed by the groups that hold them. However, work attitudes have a positive side and a negative side. Hence, we can talk about good work attitudes and bad work attitudes. To sum up the above theoretical concept and the differentiation of ‘attitudes’ from ‘values’, we come to understand that work attitudes and work values are two different things even though they shared certain qualities in common.

2.3.2 Work Value Variables versus Work Attitude Variables

*Work Value Variables*

For using ‘work values’ to measure work behaviours, Adkins and Russell (1997) have defined work value variables as Job Satisfaction, Organisation Commitment, Job Choice, Judgment of P-O Fit, and Job Performance (See Appendix II). Based on similar conceptions, Selmer and Waldstrom (2007) have constructed a survey questionnaire using a 24-item instrument originally developed by Elizur (1984) to measure general work values as listed in Appendix III.
However, Li, Liu and Wan (2008), following Sharon (2003), apply as many as 29 items of variables to measure work values in their study (see Appendix IV). It is apparent that these 29 work-variable-related items resemble very much Elizur’s 24 work variable-related items as they can be used to study different levels of working people in diverse cultural contexts. Since such academic terms about these work-variable related items are self-explanatory and their wording is explicitly understandable, the literature does not further define the meanings of such items. For example, ‘opportunity for personal growth’ does not make clear how many and what kinds of opportunities are available.

Work Attitude Variables

In contrast with the above ‘work values’ theorists, Ambrose, Arnaud and Schminke (2008) define the following ‘work behavioural items’ as ‘work attitude variables’: (1) Job Satisfaction, (2) Organisational Commitment, (3) Turnover Intentions, (4) Pre-conventional – Instrumental Fit, (part of P-O fit), (5) Conventional – Caring Fit, (part of P-O fit), and (6) Post-conventional – Independent Fit, (part of P-O fit). They use ‘work attitude objects’ for measuring relevant work attitudes in their study (See Appendix V).

Similarly, Allen et al. (2001) define job attitude variables as (1) Organisational Commitment, (2) Role Clarity, (3) Turnover Intentions, (4) Role Overload, (5) Job Involvement, (6) Job Satisfaction – Top Management, and (7) Job Satisfaction – Job Security for measuring work attitudes (See Appendix VI).

According to Somers and Birnbaum (2001), work attitudes can be assessed with a broad constellation of psychological reactions to the job and to the organisation. The set of six work attitude variables applied in their research was originally defined by Lankau and Scandura (1996) but are now adopted as the six dimensions of work attitudes/behaviours in this paper. They are described as below (see also Appendix VI):

1. Job Satisfaction – This has a very broad conceptual definition and this variable can be further broken down into many items as seen in Elizur (1984) and
Sharon (2003) as shown in subsequent sections. Among those items, pay and benefit are the most fundamental elements of job satisfaction. Benefits have been shown to be important in determining attractiveness of a job and sustaining employment rates (Heneman & Berkeley 1999). Conversely, if an employee perceives benefits to be unsatisfactory, there can be higher incidence of absenteeism, lower levels of performance, higher staff turnover, and expressions of dissatisfaction with the job (Carraher et al. 2003; Cooper 1999; Lee 2001). Herzberg, Mausner, Peterson, and Capwell (1957) conclude that there is a connection between satisfaction and at least some work behaviours, particularly turnover. Job satisfaction is found to be a useful predictor of intention to leave and subsequent turnover (Sekaran 1984).

2. **Job Involvement** – With reference to Allen et al. (2001), involvement in the job affects the relationship between the work environment and outcomes. Job involvement, synonymous with employee involvement, according to these authors, means the degree to which an employee is devoted to the job, and identified with it psychologically (Lodahl & Kejner 1965). Cotton (1993) defines employee involvement in terms of using workers’ participation to the maximum, which is intended to involve employees in the success of the organisation.

3. **Affective Commitment** – This is defined as employees’ emotional attachments to their organisations and the extent to which individuals have a strong commitment to the organisational goals and values (Meyer & Allen 1997).

4. **Continuance Commitment** – This refers to employees’ willingness to commit themselves to the organisation continuously so as to avoid the perceived cost of leaving it (Meyer & Allen 1997).

5. **P-O Value Congruence**—According to Ambrose, Arnaud and Schminke (2008), the person-organisation (P-O) fit literature is concerned with the effects of congruence (or fit) between the attributes and values of individuals and the organisation. P-O Value Congruence is defined as the compatibility between people and organisations that occurs when (a) at least one entity provides what the others needs, or (b) they share similar fundamental characteristics, or (c) both. Hence, this is the congruence between individual and organisational values. Moreover, Pratts (2008) indicates that under the operationalisation of P-O fit, the degree to which the individual perceives that
their personal values are congruent with those of the employing organisation will be related to employee attitudes and behaviours (i.e., job satisfaction, organisational commitment, ease of adjustment, intent to turn over, and actual turnover). As with general work values, it is expected that the fit between individual and organisational ethical values affects individuals’ job attitudes (Ambrose, et al. 2008).

6. **Job Withdrawal Intention** – also commonly known as ‘turnover intention’, this refers to employees’ expectations to quit their jobs and leave the organisation. Evidence from prior research indicates that ‘job withdrawal intention’ is negatively correlated with ‘job satisfaction’ (Kinnicki et al. 2002; Prottas 2008). One of the earliest and most enduring research questions related to job satisfaction has been the hypothesis that low job satisfaction would lead to withdrawal from the workplace (Landy & Conte 2007). Hence, there is a negative correlation between job satisfaction and job withdrawal intention. That is, the lower the job satisfaction, the higher the turnover intention will be.

In this research, Elizur’s 24 items are used as attitude objects to measure relevant work attitudes and in turn to predict the above six dimensions of ‘work behaviours’ of the general employees in the domain of work. From the review of the ‘attitude’ literature (see Section 2.2.2), we are sure that a behavioural item can be a kind of ‘attitude object’ to reflect attitude; therefore, ‘work behaviours’ can be predicted by work attitudes with regard to relevant ‘work attitude objects’.

In summary, researchers undertaking work value studies usually call the above work behavioural items work value variables for measuring ‘work values’. Yet researchers conducting work attitude studies normally call the same work behavioural items work attitude variables for measuring ‘work attitudes’. But, in the study of work attitudes, the same ‘work behavioural items, (i.e. work values) are also regarded as work attitude objects.

### 2.3.3 Work Behaviours and Work Attitude Objects

It is necessary to understand the difference between ‘work behaviour’ and ‘work performance’. Sometimes, people think that both terms are talking about the same
thing. In fact, there are differences between them. Broadly speaking, work behaviour is talking about the mode of action/manner behaved while working. However, work performance refers not just to actions but also to the results. In this study, work behaviours are restricted to the six dimensions of work behaviours suggested by Lankau and Scandura (1996). They are *job satisfaction*, *job involvement*, *affective commitment*, *continuance commitment*, *P-O value congruence* and *job withdrawal intentions*.

As mentioned in previous sections, attitudes can be formed only when people encounter attitude-objects, and attitude-objects can be anything that can trigger people’s attitudes relative to the said objects. In other words, without an object, people cannot form an attitude toward that object. Elizur (1984) developed 24 work variables to describe various work value situations. They are used here as work attitude-objects to reflect the six types of work attitudes of employees investigated in this survey.

2.3.4 Work Attitudes Influence Work Behaviours

There is no doubt that attitudes have specific impacts on behaviours (Ajzen & Cote 2008; Ajzen & Fishbein 2005; Costa & DeMatos 2002; Oppenheim 2001; Thomas & Znaniecki 1918; Watson 1925). Therefore, it logically follows that people’s work attitudes also influence their work behaviours. Cotton (1993) has demonstrated that the two-factor theory of Herzberg et al. (1959) was developed by conducting research on job attitudes. Such research consisted of employee work attitude surveys asking subjects to describe a specific time when they felt exceptionally good or exceptionally bad about their jobs, and the impact of these attitudes was assessed on such outcomes as work behaviours, social relationships, and their attitudes about the organisation. In this respect, Trewatha and Newport (1979) show that attitudes are personal feelings and opinions that influence employee behaviours in response to job elements and personal relationships within the organisational environment. They argue that, through work attitude surveys, management can better understand employee feelings toward organisational decisions and policies before their process of formulation and implementation of strategies.
However, to explain the above interactive relationships in the organisational environment, Campbell et al. (1970) developed a Model of Behaviour containing 3P elements of ‘person, process and product’, which elements illustrate that an individual person’s job behaviours rest on a motivational process to generate the final product result that is the maximisation of organisational efficiency as well as high productivity. Regarding the process of motivation, they have also referred to ‘expectancy theory’ to describe how individuals have cognitive expectancies concerning personal goal achievement regarding values and rewards in the organisational environment.

Similarly, as mentioned in the previous sections, employees’ work attitudes are often explained by the ‘expectancy theory’, which influences employees’ relative work behaviours. Campbell et al. (1970) further point out that the relationship between attitude and behaviour is always in the sequence starting from “attitude”, “cognition”, “feeling” to “behaviour”. This clearly identifies which is the independent variable and which is the dependent variable.

In the domain of work, Newstrom (2011) illustrates that attitudes are the feelings and beliefs determining how employees will perceive their environment, commit themselves to intended action, and ultimately behave. Nevertheless, Porter et al. (2003) have presented a figure/diagram entitled ‘Beliefs, Attitudes, Intentions, and Behaviours’, originally developed by Fishbein (1967), to depict that job attitudes follow on from beliefs about the job, which then leads to job behaviours through intentions (see Figure 8).

Figure 8: Beliefs, Attitudes, Intentions, and Behaviours

Based on their explanation, it seems that negative work attitudinal variables (e.g., job is dull/dissatisfaction) would usually generate negative work behaviours (e.g., leaving the organisation). All the above examples mean that job attitudes can affect actual job behaviours. After all, we can easily understand that work attitudes can be regarded as independent variables and work behaviours as dependent variables. Again, the former are predictors, but the latter are performers.
Discussion

Evaluation of all the above measuring variables of ‘work attitudes’ and ‘work values’ in the previous section shows that many of them are very similar in meaning but with slightly different wording. For example, *job withdrawal intention* is the same as *turnover intention*, and *P-O value congruence* is similar to *P-O fit*. These terms can be applied interchangeably for measuring employees’ work attitudes as well as their behaviours in the workplace. Again, the most significant difference between them is that work values with broader cultural and ethical background are derived from values which are always viewed as positive by the groups that hold them, but work attitudes with stronger individual associations can be viewed as positive, negative or neutral. For example, it appears that job withdrawal intention and turnover intention are negative work-attitude-object variables even though they are not well differentiated by the above theorists. Most of the time, such theorists talk about job satisfaction, commitment, job involvement, participation, achievement, security of job, recognition, and work-life balance, and these ‘work value’ or ‘work-attitude-object’ variables are always interpreted positively in their contexts. However, this study only focuses on employees’ work attitudes in a time of economic recession so that we can logically assume that some of the abovementioned work-attitude-object variables will be negative. For instance, it is of course possible that job satisfaction turns to *job dissatisfaction*, job security to *job insecurity*, pay rise to *pay cut*, work-life balance to *work-life imbalance*. Since such descriptions of phenomena are based on logical reasoning, the actual employees’ work attitudes in response to the current economic recession need to be explored in the following chapters of this research project.

2.3.5 Organisational Decline, Organisational Downsizing and Work Attitudes

Typically, organisations’ responses to economic recession in circumstances with no opportunity for growth are to cut spending and to cut manpower. Such actions resulting from management strategies for a reduction of the workforce can frequently be seen in the events of *organisational downsizing* mostly resulting from *organisational decline* on account of financial problems. Organisational downsizing is an intentional proactive management strategy that may be applied in either booming
or slumping situation, and organisational decline is an involuntary negative consequence of non-adjustment to adverse environmental circumstances (Selmer & Waldstrom 2007).

Another major characteristic of organisational downsizing pointed out by Freeman and Cameron (1993) is that a set of purposive activities undertaken by the firm for reducing the work force and work processes is to improve efficiency, productivity and competitiveness. In this respect, organisational downsizing can be interpreted as a mere reduction in a firm’s size.

However, according to D’Aveni (1989), organisational decline relates to two critically declining resources: financial and managerial resources. The former involves decreases in liquidity, profitability, and borrowing capacity but the latter involves the loss of prestigious top managers, and the final impact on an organisation’s behaviour would be bankruptcy. McKinley (1993) concludes that the general causes of organisational decline include: maladaptation to the environment, a downturn in organisation size or performance, reduction in the workforce, a decrease in an organisation’s resource base, and failure to anticipate and neutralise threat.

Freeman and Cameron (1993) further emphasise that organisational decline and downsizing are separate phenomena conceptually and empirically and that decline usually results from a loss of market share, loss of revenues, or unwitting loss of key human resources in contrast to downsizing’s intentional hiring freezes, early retirement programs, or layoffs and mostly reductions in personnel. In short, decline is usually a kind of reactive behaviour differing from downsizing’s proactive strategies. If these two types of organisational behaviours are compared, organisational decline is unintentional and decline happens owing to changing environmental factors and deteriorating organisational performance; downsizing, in contrast, can be both functional and intentional. Freeman and Cameron (1993) also argue that decline does not necessarily produce a reduction in personnel or affect work processes. Organisations can downsize without decline and, in many other cases, downsizing may be a response to decline. Generally speaking, downsizing is implemented by strategies of across the board cutbacks, job redesign involving reductions of work as well as numbers, and radical changes in culture, attitudes and
overall ethos of working (Sahdev 2003). In fact, downsizing is an organisational decision to reduce the workforce size and to change work practices for improving effectiveness and efficiency (Freeman & Cameron 1993) and may be implemented in any time period and is not necessarily restricted to economic recession. Notwithstanding the above situations, downsizing in many cases is derived from organisational decline, which originally results from poor business performances or unfavourable financial or business environments.

Whether downsizing is caused by decline or not, it inevitably involves a restructure. According to Allen et al. (2001), the fact that the morale of employees will decrease after a restructuring of the organisation, is supported by well-documented studies of the attitude states of survivors of downsizing. Noer (1999) coins the term lay-off survivor sickness to describe this phenomenon. It is characterised by guilt, lack of commitment to the organisation, and fear. Mishra and Speitzer (1998) have formulated another theory to explain employee behaviour in a downsizing environment, called the Lazarus theory of stress, which also pinpoints the fear experienced by survivors concerning the loss of co-workers, the possibility of cuts in pay, and the risk that they may lose their jobs as well some time in the future. These findings concur with the view of Sahdev (2003), who also found that negative emotions and behaviours can follow downsizing. Emotions such as guilt, anger and frustration are common, as are behaviours such as reduced commitment to the organisation, and decreased job involvement (Allen et al. 2001; Kozlowski et al. 1993). The wave of lay-off inevitably gives employees a sense of insecurity. Shoss (2017) developed a framework of four overarching mechanisms—stress, social exchange, job preservation motivation, and proactive coping—through which to influence reactions to job insecurity. In summary, it is clear that organisational downsizing, whether derived from organisational decline or not, does have a significant impact on employees’ job attitudes toward their job behaviours.

However, employees’ job attitudes in response to such impacts may vary among different groups. For example, male employees’ job attitudes toward their job behaviours, under the above environmental conditions, may differ from those of female employees, and older employees’ job attitudes may differ from those of younger employees, and the lower level employees’ may respond differently to
middle or higher-level employees (Allen et al. 2001; Armstrong-Stassen & Schlosser 2008; Li et al. 2008). Further discussions on this theme will be found in a later chapter.

After the organisation cuts the number of employees, fewer employees have to do the same amount of work as before, and this generates negative impacts on the survivors; for example, overload, burnout, inefficiencies, conflict, and low morale are possible consequences (Brockner, 1988). From a similar standpoint, Armstrong-Stassen and Schlosser (2008) point out that many studies on organisational downsizing have been dominated by negative consequences for the organisation and its remaining employees even though there are exceptions. To some extent, Allen et al. (2001) also indicate that downsizing has various significant impacts on work attitudes over time, and the initial impact is generally negative.

In contrast to the above scholars’ conceptions regarding negative work attitudes in a downsizing organisation, the researcher wants to find out whether any positive work attitudes still exist in an economic recession. The researcher presumes that there will be fewer job opportunities in an economic downturn so that people may want to work harder and may even agree to more work commitments in order to keep their jobs.

Not all organisations or businesses will choose downsizing strategies in response to an economic recession; however, employees in general still would have the fear of being laid off in such adverse financial circumstances. Organisational decline and organisational downsizing were commonly seen in an economic downturn. Hence, the perception and belief about a downsizing or declining environmental factor will exist and affect individual’s work attitudes. In previous economic recessions in Hong Kong, people’s suffering time-periods were usually not longer than one year. For example, the 1998 Asian Financial Crisis and the 2003 SARS Epidemic Invasion both lasted for only around 10 months and the economy soon recovered because of the improvement of export trade, which was regarded as one of the four pillars of Hong Kong’s GDP (Dec. 2008, Hong Kong Statistics). However, in this GFT, our export volume could not be maintained because of the contraction of demand worldwide, especially since Hong Kong’s major export markets such as the United States and Europe were in the centre of the catastrophe. At the same time, another pillar of the local economy, which
tourism, was also damaged because fewer tourists came from those countries, even though the number of visitors from the mainland remained stable.

According to the Hong Kong Census and Statistics Department, there was a 12.8 percent decline of the export trade in December 2008; meanwhile, the slowdown of the tourist industry affected other business sectors such as logistics, retail, hotels and catering. On account of this domino effect, many businesses that could not maintain a profitable situation were declining, downsizing, and even going bankrupt. Downsizing became the most common strategy applied by declining organisations in dealing with fundamental, structural changes in the world economy (Mishra & Spreitzer 1998). The above sections have introduced a number of attitude variables, work behavioural variables, environmental and organisational factors. Sections 2.4, 2.5, and 2.6 classify and group all the above items into three major categories of variables for further study. They are independent, intervening and dependent variables.

2.4 The Independent Variables

A variable is simply an attribute for which cases vary. Cases can be everything: organisations, people, structures, places and so on (Bryman & Bell 2003). Those variables doing the causing or influencing are termed independent variables (Sapsford 2007). In this research, the independent variables are defined as environmental and organisational factors including (1) Belief about the damages owing to the GFT, (2) Organisation decline, and (3) Organisational downsizing. On many occasions, the terms ‘factors’ and ‘variables’ are used interchangeably by the researcher. From the researcher’s perspective, the GFT affecting the whole society can be deemed as the big environmental factor but ‘organisational decline’ and ‘organisational downsizing’ can be considered small environmental factors. These factors or variables are assumed to influence employees’ work attitudes and in turn to affect employees’ work behaviours. Through the review of the literature, environmental or organisational factors are commonly regarded as potential determinants of people’s attitudes (Fishbein & Ajzen 1975; Lines 2005; Salancik & Pfeffer 1978; Wood 2000).
2.5 Intervening Variables (Mediators)

In this model, work attitude variables are deemed as the intervening variables that are reflected through the work attitude objects. The formation of a mediating effect suggests that the environmental variables (GFT-related factors), work attitude variables, and behavioural variables are interrelated in a sequential manner. In other words, the intervening function exists when the environmentally related variables influence work attitude variables, and work attitude variables in turn influence behavioural variables. In this context, work attitude variables are also conceived as ‘mediators’, and the mediating effect will be further discussed in the data analysis chapter. In theory, attitudes are normally formed according to a person’s consideration of characteristics belonging to an attitude object (Thompson & Hunt 1996). It is believed that, under some circumstances, attitudes are excellent predictors of behaviours; for example, knowledge of a person’s attitude toward an object serves as a reliable basis for predicting his or her behaviour with regard to the same object (Eckhardt & Ermann 1977). Therefore, on most occasions, particular work attitude objects are used to measure particular work attitudes towards particular work behaviours. Since attitude objects theoretically can be anything (Ajzen & Fishbien 2005; Kruglanski & Stroebe 2005), the researcher has adopted Elizur’s 24 work values as work attitude objects to trigger the 24 relative work attitudes which are the intervening variables in this study. They include: (1) advancement or chance for promotion; (2) achievement in work; (3) job interest, to do work which is interesting to you; (4) meaningful work; (5) opportunity for personal growth; (6) recognition for doing a good job; (7) esteem, that you are valued as a person; (8) job security, having a permanent job; (9) opportunity to meet people and interact with them; (10) convenient hours of work; (11) pay, the amount of money you receive; (12) work conditions, comfortable and clean; (13) benefits, vacation, sick leave, pension, insurance, etc.; (14) job status; (15) use of ability and knowledge in your work; (16) influence in work; (17) responsibility; (18) independence in work; (19) feedback, concerning the results of your work; (20) contribution to society; (21) company, to be employed by a company for which you are proud to work; (22) influence in the organisation; (23) supervisor, a fair and considerate boss; and (24) co-worker, fellow workers who are pleasant and agreeable. At this point, the above 24-work attitude
variables are taken to be the *intervening variables*. Their formation is demonstrated in Figure 9 below.

**Figure 9: Example of Formation of the First Work Attitude Variable**

In order to explain the issue of ‘job withdrawal intentions’, three additional attitude variables were also developed. They include ‘tend to leave the organisation if workload is heavier than before’, ‘tend to leave the organisation if salary has been cut’, and ‘tend to leave the organisation if benefits have been cut’. So, a total of 27 intervening variables were established in this model.

### 2.6 Dependent Variables

These variables are caused or influenced by others (Sapsford 2007). In this context, the ‘six dimensions of work behaviours’ (Lankau and Scandura 1996) are considered the dependent variables, namely (1) *job satisfaction*, (2) *job involvement*, (3) *affective commitment*, (4) *continuance commitment*, (5) *P-O value congruence*, and (6) *job withdrawal intentions*. They are all assumed to be influenced by employees’ work attitudes. Also, these ‘six work behaviours’ are indirectly affected by the independent variables (the 3 variables of section 2.4), and their relationship is mediated by the ‘work attitude variables’ (the 27 intervening variables of section 2.5).

### 2.7 Research Model

This research model is based on the interrelationships among the above three types of variables. That is, the three GFT- related factors are regarded as independent variables,
the employees’ 27 work attitudes as intervening variables, and the six dimensions of work behaviours as dependent variables (see Figure 10). Despite social and interpersonal change, the attitude construct, according to Ajzen and Fishbein (2005), remains a vital theoretical predictor for social behaviours in all such social-psychological domains. Furthermore, as described by Oppenheim (2001), attitudes are determinants of behaviours even though they are like abstraction: they are real enough when the person who holds them. In the domain of work, general attitudes reflected from different work situations become work attitudes. In the presence of environmental factors, there is no doubt that employee work attitudes are theoretically regarded as intervening variables which influence their work behaviours in a sequential manner. That said, people’s work attitudes are also deemed as special variables because they cannot stand alone without being accompanied by attitude objects. Initially, they are dormant and very stable until the intervening function takes place under special environmental factors when people encounter certain attitudinal objects/situations and the said attitudes are activated subsequently. So, in this model, the intervening mediators (27 items of work attitudes) act as special independent variables which influence the six dimensions of employees’ work behaviours.

Figure 10: Basic Employee Work Attitudes Model

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Intervening Variables</th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Environmental and Organisational Factors</td>
<td>27 items of Work Attitude Variables</td>
<td>6 Dimensions of Work Behaviour</td>
</tr>
</tbody>
</table>

(Source: Developed for this research)

2.8 Development and Formulation of Research Hypotheses

In a systematic research process, hypothesis formation can only start appropriately after the establishment of the research model and its overall framework. Hence, this section is in compliance with such a conventional practice.
(A) Hypotheses Development

Verma and Beard (1981) define a hypothesis as a tentative proposition which is subject to verification through subsequent investigation. A proposition is a declarative statement about observable phenomena or concepts that may be judged as true or false. Thus, a hypothesis is formed when a proposition has been formulated for empirical testing (Cooper & Schindler 2008). A hypothesis serves several important functions; for example, guiding the direction of the study, identifying whether facts are relevant or not, suggesting the most appropriate form of research design, and providing a framework for organising the conclusions. Among the possible formulation designs, many researchers would prefer using a null hypothesis to test the findings. According to Eckhardt and Ermann (1977), the null hypothesis lies at the centre of the attempt to disprove a proposed theory when samples are involved, and therefore a null hypothesis is a statement that contradicts the proposed theory. If the null hypothesis can be rejected, the proposed theory will be tentatively accepted and vice versa. In this research project, the researcher has developed the following hypotheses for examination:

(B) Hypotheses Formulation
2.8.1 Hypothesis One

The first research question is: Do environmentally related factors under the Global Financial Tsunami (belief about the damage due to the GFT, organisational decline, and organisational downsizing) influence employees’ work attitudes? So, the first hypothesis can be formulated as:

**H1. Environmentally related factors of the GFT do not influence employees’ work attitudes.**

The framework of this study is based on certain phenomena of economic downturns under the GFT, which widely affected the wellbeing of the working classes in Hong Kong. Organisational decline and downsizing were generally derived from economic recession during the period of study. Some working people were suffering more damage than others. Maybe some other people were not even affected for a time because their organisations were still healthy and showed no sign of declining or...
downsizing, but those people may have sensed the suffering of their friends or acquaintances and would have believed that the damage was caused by the GFT.

For easy testing, the first hypothesis should be subdivided into three sub-hypotheses, and each specifies an environmentally related factor:

1. **H1a**: Beliefs about the damage due to the global financial tsunami do not influence employees’ work attitudes.
2. **H1b**: Organisational decline under the GFT does not influence employees’ work attitudes.
3. **H1c**: Organisational downsizing under the GFT does not influence employees’ work attitudes.

*Figures 11, 12 and 13 show the three stages in the development of hypotheses.*

**2.8.2 Hypothesis Two**

The second research question is: Do employees’ work attitudes influence their work behaviours? So, the second hypothesis can be formulated as:

**H2. Under the shadow of the GFT, employees’ work attitudes have no influence on their work behaviours.**

This may be contradictory to data collected for a null hypothesis, but the researcher needs to test and prove whether it is true or false, even though many theories state that attitudes influence behaviours. During an economic recession, it is widely believed that the negative work attitudes of employees will inevitably generate negative work
behaviours. Is it possible that negative work attitudes of employees could generate positive work behaviours? Or is there no effect on their work behaviours? The testing of this second hypothesis will provide the answer.

Figure 12: Second stage development of hypotheses from the basic model

2.8.3 Hypothesis Three

The third research question is: Do the environmentally related factors of the GFT influence employees’ work behaviours through the formation of employees’ work attitudes? So, the third hypothesis can be formulated as:

**H3. The relationship between environmentally related factors of the GFT and employees’ work behaviours is not mediated by employees’ work attitudes.**

The testing of this hypothesis involves all three types of variables – the independent variables being the environmentally related factors covering ‘belief about the damage due to the GFT’, ‘organisational decline’, and ‘organisational downsizing’; the intervening variables being the group of 27 work attitudes, and the dependent variables being the six dimensions of work behaviour. To clearly identify the linkages among the environmentally related factors, employees’ work attitudes and employees’ work behaviours, it is necessary to subdivide this hypothesis into the three sub-hypotheses below:

(1) **H3a:** The relationship between belief about the damage due to the GFT and employees’ work behaviours is not mediated by employees’ work attitudes.

(2) **H3b:** The relationship between organisational decline and employees’ work behaviours is not mediated by employees’ work attitudes.
(3) **H3c**: The relationship between organisational downsizing and employees’ work behaviours is not mediated by employees’ work attitudes.

Figure 13: Final stage development of hypotheses from the basic model:

Beliefs about the damages of the GFT

Organisational Decline

Organisational Downsizing

H3a

H3b

H3c

The group of 27 Work Attitude Variables

6 dimensions of Work Behaviours

(Source: Developed for this research)

2.8.4 Hypothesis Four

The fourth research question is: Is there any association between the attitudinal variables of job satisfaction and job withdrawal intention? So, the fourth hypothesis can be formulated as:

**H4. Under the shadow of the GFT, there is no association between the attitudinal variables of job satisfaction and job withdrawal intention.**

Job satisfaction is a positive work attitude in contrast to job withdrawal intention as a negative work attitude. Both variables are negatively correlated as described in the previous literature review chapter. The researcher sought to find out whether there is a positive correlation between them in the time of an economic downturn during the GFT.

2.8.5 Hypothesis Five

The fifth research question is: Is there any association between the attitudinal variables of affective commitment and P-O value congruence? So, the fifth hypothesis can be formulated as:

**H5. Under the shadow of the GFT, there is no association between the attitudinal variables of affective commitment and P-O value congruence.**
Among many work variables, this researcher believes that there is a particularly close relationship between affective commitment and P-O value congruence based on the cognition of the word ‘affective’ with a positive meaning related to ‘value’. According to Meyer and Allen (1997), affective commitment is defined as employees’ attachments to their organisations and the extent to which individuals identify their strong commitment with the organisation’s goals and values. In other words, this kind of employee commitment is easier to match with the value of the organisation. So, it is worthwhile to test this hypothesis under the adverse environment of the GFT.

**Further Discussion**

How does the review of the literature in this thesis help develop the Attitude Model and establish the empirical work of hypotheses testing? Basically, the researcher already has a conceptual topic in mind and has identified what the relative variables are in this research in a logical manner. With the support of the literature review, the researcher can apply appropriate theories linking such variables for establishing a model and then developing research questions and or hypotheses for eventual testing.

The topic of this project is about studying employees’ work attitudes in the time of the GFT, so, what variables are thought to be relative to this study? Logically, it is not difficult for people to think about some environmental or organisational variables as well as work behavioural variables that are related to work attitudinal variables under the shadow of GFT. For this researcher, it is also not difficult to make the assumption that environmental/organisational variables could influence employees’ work attitudes and, in turn, that work attitudes could influence work behaviours in a directional order.

And, then, what variables of each of the above-mentioned 3 categories are relevant to construct the research model? Borrowing some relevant variables from past researches through literature review was necessary. As a result, three environmentally related variables thought to be as independent variables, twenty-seven attitudinal variables as intervening variables and six work behavioural variables as dependent variables were selected to construct this research model.
In addition, during the literature review process, the researcher was able to find relevant theories to define the inter-relationships between the above-selected variables. For defining the such relationships, the following sections should be noted:

2.2.4  The Influence of Environments on Attitudes
2.2.5  The Influence of Beliefs on Attitudes
2.2.6  The Influence of Attitudes on Behaviours
2.3.4  Work Attitudes Influence Work Behaviours
2.3.5  Organisational Decline, Organisational Downsizing and Work Attitudes

2.9  Summary of the Chapter

The core contents of this chapter have covered the theoretical conceptions of the parent discipline, the related business discipline, and the immediate literature review of work values and work attitudes. This was followed by defining the independent variables, the intervening variables, and the dependent variables. Additionally, the major environmentally related factors influencing people’s work attitudes, for example, employees’ belief about the damage caused by the GFT, organisational decline, and organisational downsizing, have been discussed. Lastly, the formation of research hypotheses has also been clearly described and explained. The following chapter will describe the methodology and ensure that the research design and strategies are in line with the existing variables and factors of the ‘employees’ work attitudes model (WAM)’.
CHAPTER 3
RESEARCH METHODOLOGY

3.1 Introduction

3.1.1 Chapter Objective and Chapter Structure

Chapter 2 presented a comprehensive review of literature and issues relevant to the topic of this thesis. Related theories and concepts were thoroughly discussed, and a framework was clearly mapped out for the establishment of a logical model as well as the formulation of research hypotheses.

In this chapter, the main focus is to identify the best methods and select appropriate strategies for making this research model a practical and competent one. Hence, the following sections cover research design, sampling techniques, questionnaire development, and data collection methods. In particular, a tailor-made survey approach, namely ‘mail-survey assisted by multi-level dispatchers/collectors’, which is based on a kind of ‘relationship marketing’ technique, will be applied for effective data collection in this research. Finally, the accuracy of statistical measurement, the importance of reliability and validity as well as ethical considerations will also be implemented and discussed in this chapter.

The structure of Chapter 3 is given in Figure 14.
Figure 14: Structure of Chapter 3

- 3.1 Introduction
  - 3.1.1 Chapter objectives and structure
  - 3.1.2 Methodology and methods

- 3.2 Research design and strategy

- 3.3 Justification of the research approach for this study

- 3.4 Survey object

- 3.5 Sampling design and technique

- 3.6 Questionnaire design

- 3.7 Data collection
  - 3.7.1 Source of data
  - 3.7.2 Data collection method
  - 3.7.3 Pilot test
  - 3.7.4 First data collection
  - 3.7.5 Second data collection

- 3.8 Data processing
  - 3.8.1 Organizing & renumbering questionnaires
  - 3.8.2 Checking & coding the data
  - 3.8.3 Inputting the data (Data entry)
  - 3.8.4 Testing the data

- 3.9 Statistical measurement and analysis

- 3.10 Error in survey research

- 3.11 Reliability and validity

- 3.12 Ethical considerations

- 3.13 Summary of the chapter
3.1.2 Methodology and Methods

Generally, research designs involve two kinds of methods, namely qualitative research and quantitative research.

Qualitative methods rely on observation, interviews, case studies, and analysis of diaries or written documents and produce flow diagrams and narrative descriptions of events or processes, but very seldom rely on numbers for measurement (Landy & Conte 2007). Rather than seeking to test theories, qualitative research aims to build theory, based on findings from the researcher’s immersion in the field of research, and interpretation of data gathered from detailed accounts of phenomena as they occur, whether it be an event, or interactions between people, or between people and conditions surrounding a significant event (Cooper & Schindler 2008).

In contrast, quantitative methods rely heavily on testing, rating scales, questionnaires, and physiological measures, and results are expressed in numerical terms (Landy & Conte 2007). Quantitative methodology involves the generation of numerical data, and uses a deductive approach, based on an objectivist paradigm, as in the case of a predictive natural science approach (Bryman & Bell, 2003). Applied to business research, quantitative methodologies typically measure behaviours, knowledge, opinions, or attitudes. These methodologies answer quantitative questions, such as who and when, how many, how much, and how often (Cooper & Schindler 2008).

Table 2: Main Features of Quantitative and Qualitative Methods:

This table concisely describes the differences between the two methods under thirteen research criteria. It is able to give the researcher a rather clear concept of what approach should be applied in the research.

<table>
<thead>
<tr>
<th></th>
<th>Quantitative Approach</th>
<th>Qualitative Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Origin/Discipline</strong></td>
<td>Natural Sciences – ‘transplanted’ to Social Sciences</td>
<td>Sociology, anthropology, social psychology, cultural studies</td>
</tr>
<tr>
<td><strong>Belief/theoretical base/Epistemology</strong></td>
<td>Positivism, Objectivism</td>
<td>Naturalism/system as a whole (also, constructionism,</td>
</tr>
<tr>
<td><strong>Subject-object relations</strong></td>
<td>Separation of subjects (the researcher) &amp; objects (the researched)</td>
<td>Recognise the inseparable nature of subjects &amp; objects</td>
</tr>
<tr>
<td>----------------------------</td>
<td>------------------------------------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td><strong>Values</strong></td>
<td>Facts only, value free</td>
<td>Recognise that facts &amp; values overlap</td>
</tr>
<tr>
<td></td>
<td>More objective</td>
<td>More subjective</td>
</tr>
<tr>
<td><strong>Causality</strong></td>
<td>Causal relations (predictability)</td>
<td>No absolute causal relations, each case is unique, external variables always exist</td>
</tr>
<tr>
<td><strong>Open or closed system</strong></td>
<td>More structured/ more controls/ closed-ended</td>
<td>Less structured/more open-ended</td>
</tr>
<tr>
<td></td>
<td>Reductionism: isolate certain aspects for study</td>
<td>Holistic</td>
</tr>
<tr>
<td></td>
<td>Predefined &amp; classified responses or variables (choices 1 to 5)— generating hypotheses</td>
<td>No or only roughly defined variables/categories, rarely any rigid hypotheses testing</td>
</tr>
<tr>
<td><strong>Purposes</strong></td>
<td>Generality, universal law, representativeness, predictability, reliability</td>
<td>Thick description, meanings, details, richness, underlying explanations</td>
</tr>
<tr>
<td></td>
<td>Testing theories &amp; hypotheses</td>
<td>Developing concepts, theories from data</td>
</tr>
<tr>
<td><strong>Theory Development</strong></td>
<td>Deduction: from general inferences to particular instances</td>
<td>Induction: from particular cases to general inferences</td>
</tr>
<tr>
<td><strong>Deals with</strong></td>
<td>Numbers, figures</td>
<td>Meanings—that reside in social practices</td>
</tr>
<tr>
<td><strong>Sample size</strong></td>
<td>Large</td>
<td>Small (even one: case studies)</td>
</tr>
<tr>
<td><strong>Source of data</strong></td>
<td>Respondents</td>
<td>Anything that carries ‘meanings’: interviews, observations, documents, sounds, pictures, existing research</td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td>Linear: step by step</td>
<td>Parallel run of data collection &amp; analysis; back-and-forth, cross referencing is common</td>
</tr>
<tr>
<td><strong>Examples</strong></td>
<td>Experiments, structured surveys</td>
<td>Observations, open interviews (in-depth, focus-group), life-story, narrative, ethnography grounded theory</td>
</tr>
</tbody>
</table>

(Source: from Course B950 OUHK 2007)
All methods of research ultimately require interpretation, regardless of whether they are quantitative or qualitative. One of the most important issues in conducting research is how widely the results can be generalised. A researcher is able to generalise results to areas that have been sampled in his or her specific study. The researcher is just like an explorer who tries every effort to investigate and understand the phenomenon of interest, and should use all of the information available, regardless of its pattern. The key is to combine information from multiple sources for in-depth study. This is called triangulation (Landy & Conte 2007).

In this research, a quantitative approach has been selected for the overall projection of the study. However, some degree of triangulation has also been applied in order to enhance the generalisability of the outcomes. As suggested by Bryman and Bell (2003), a quantitative approach has been the dominant method for conducting business researches.

3.2 Research Design and Strategy

Research design provides the overall structure or architecture for the research study and allows investigators to conduct scientific research on a phenomenon of interest (Landy & Conte 2007). Developing a research design, according to Cooper and Schindler (2008), usually covers the following aspects: (a) creating the blueprint for the collection, measurement, and analysis of data, (b) aiding the researcher in the allocation of limited resources by posing crucial questions about correct choices in methodology, (c) planning and structuring an investigation so as to obtain answers to the research questions, and (d) developing the framework, model, organisation, or configuration of the relationships among variables of the study. Jankowicz (2000) suggests that several questions should be answered in advance: What kind of sampling method is appropriate? What size of sample should be chosen? What kind of format and technique are appropriate? How these questions relate to each other is represented in Figure 15.
3.2.1 Research Techniques

In contrast to research methods, research techniques are particular step-by-step procedures used to gather data, and analyse them for the information they contain. Jankowicz (2000, p.235, p.268, p.299) has introduced the following techniques:

- Semi-structured, open-ended techniques: the conversation, the individual interview, the key informant interview, and the focus group.
- Fully structured techniques: the structured questionnaire, and the structured face-to-face interview, together with material on postal and telephone variants.
- Additional techniques: the repertory grid, attitude scaling, and the observational techniques of structured observation and the field experiment.

According to Cooper and Schindler (2008), an observation approach and techniques are incapable of revealing critical elements so that researchers usually use a communication-based approach in order to learn about opinions and attitudes. A communication approach involves surveying or interviewing people and recording their responses for analysis. In other words, a survey design is a measurement process.
in a communication-based approach. Information about past events is often available only through surveying or interviewing people who remember the events; thus, the choice of a communication-based survey versus an observation approach may seem an obvious one, given the directions in which investigative questions may lead (Cooper & Schindler 2008).

Therefore, in this research, a survey design has been adopted, consistent with Jankowicz’s suggestion that surveys are particularly useful when the researcher wants to contact relatively large numbers of people to obtain data on the same issue or issues, often by posing the same questions to all. The meaning of ‘survey’ always indicates human respondents from whom the researcher wants to obtain basic data by talking, either face-to-face, or by means of the telephone, or by written questionnaire (Jankowicz 2000). In fact, written questionnaires dominate the various survey designs even those with different techniques.

However, this survey design is based on a ‘one-shot retrospective technique’ in which the survey was carried out at the end of the time period, using people’s recollections to measure past events. It has some weaknesses because recollection can be faulty and the respondents tend to reconstruct and make sense of the past events in terms of what happened to them and what they think when surveyed so that it may not be as accurate as a contemporaneous product (Sapsford 2007). However, some clinical researchers and psychologists still rely heavily on self-reports of memories of experiences, emotions, symptoms, traits, and behaviours in order to evaluate a subject’s situation. This is the case with questionnaires and interviews that ask the respondent to rate items or answer questions based on reminiscences (Solhan et al. 2009). Strengthening memory can reduce a variety of recall biases so that the practitioner or researcher has to lead with a heuristic strategy and provide enough time for the respondent to think about the past events. Solhan, Trull, Jahng and Wood (2009) point out that people are more likely to rely on these strategies when asked to reminisce over long periods of time or when asked to report on their general tendencies or traits. In this study, questionnaires were dispatched to respondents, and they were allowed enough time to complete the forms at home. This ensured the respondents had plenty of time to think about the events that had big impacts on them. Questionnaire dispatchers were also advised to apply the heuristic approach to guide respondents. According to reasoning
described in previous sections, a critical event can usually generate strong memories so it can eliminate recall bias. Hence, the choice of a survey method was justified in this study of employee attitudes related to the period of economic downturn under the shadow of the GFT.

A system of classification for distinguishing between the typical research designs covers three basic types (Bryman & Bell 2003; Spector 2001) summarised below and depicted in Table 3:

(1) Experimental design – participants are randomly assigned to different conditions.
(2) Quasi-experimental design – participants are assigned to different conditions, but random assignment to conditions is not possible.
(3) Non-experimental design – does not include any ‘treatment’ or assignment to different conditions.

Spector (2001) further identifies two commonly adopted non-experimental designs as:

(a) Observational design – For example, the research observes employee behaviour and systematically records what is observed.
(b) Survey design – For example, this research strategy in which participants are asked to complete a questionnaire or a survey form. Survey design is particularly useful when contacting relatively large numbers of people to obtain data on the same issue or issues, often by posing the same questions to all. There are two main types of survey design:
   (i) Cross sectional survey: investigation on a sample at a single point in time.
   (ii) Longitudinal survey: continuous studies on a sample on more than one occasion in different periods of time.

(4) Case study – The basic case study entails the detailed and intensive analysis of a single case.
(5) Comparative study – This kind of design entails a study using more or less identical methods of two or more contrasting cases.
Table 3: Different Research Designs using Quantitative Methods

<table>
<thead>
<tr>
<th>Research Design</th>
<th>Quantitative Method</th>
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<tbody>
<tr>
<td>(1) Experimental design</td>
<td>Participants are randomly assigned to different conditions.</td>
</tr>
<tr>
<td>(2) Quasi-experimental</td>
<td>Participants are assigned to different conditions, but random assignment to conditions is not possible.</td>
</tr>
<tr>
<td>design</td>
<td></td>
</tr>
<tr>
<td>(3) Non-experimental</td>
<td></td>
</tr>
<tr>
<td>design</td>
<td></td>
</tr>
<tr>
<td>(a) Observational design</td>
<td></td>
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<tr>
<td>(b) Survey design</td>
<td></td>
</tr>
<tr>
<td>(i) Cross Sectional</td>
<td></td>
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<tr>
<td>(ii) Longitudinal</td>
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<tr>
<td>(4) Case study</td>
<td></td>
</tr>
<tr>
<td>(5) Comparative study</td>
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</table>

(Source: Adapted from Bryman & Bell 2003; Spector 2001)

3.3 Justification of the Research Approach for this Study

The reason for adopting a quantitative research approach in this project is that the target population is big, and the research studies the general employees in Hong Kong. ‘General employees’ means different classes of workers in all kinds of industries and businesses. As a rule, a study should have a large sample size in order to represent the whole population. In this research, the number of variables is also big so that a quantitative research approach would be appropriate for examining the causal relationships among such variables. In business research, studies usually focus on the measurement of people’s behaviour, knowledge, opinions, or attitudes, and answer questions related to how much, how often, how many, when, and who; therefore, a quantitative research method is preferred (Cooper & Schindler 2008). Bryman and Bell (2003) agree that a quantitative approach has been the dominant method for conducting a business research. This project is more than just a business study, and it also has the characteristics of certain social and psychological studies. On account of the big population involved, a bigger sample size covering general employees of various businesses is required so that a quantitative study is suited to the purpose of the project. In light of the above explanations and suggestions, this research is thus justified in applying a quantitative method, and is visually represented in Figure 16.
Figure 16: Process of Quantitative Research

4. Devise measures of concepts  5. Select research site(s)
6. Select research subjects/respondents
7. Administer research instruments/collect data
11. Write up findings/conclusions

(Source: Adapted from Bryman & Bell, 2003)

3.4 Survey Object

In this project, the survey object is general employees in Hong Kong. They are composed of workers of different levels coming from various trades and industries, and their background and history are briefly introduced in the following sub-sections.

3.4.1 A Brief Introduction of the Industrial Development of Hong Kong

Hong Kong began as a fishing village geographically located off the southern coast of China and was ruled by the Governor of Guangdong Province in the times of the Chinese imperial dynasties. On 29 August 1842, the Imperial Qing Dynasty and Britain signed the Treaty of Nanjing to mark the end of the Opium War that erupted due to Chinese officials confiscating, burning opium and prohibiting the British from trading in opium in China. Defeated in the opium war, China was forced to cede the Territory to the British Queen and provide British traders with a harbour for unloading their goods. Thus, Hong Kong became a Crown Colony of the United
Kingdom. After 155 years of British rule, Hong Kong was eventually handed over to China by the United Kingdom on 1 July 1997.

The industrialisation of Hong Kong started in the late 1960s, and its production initially concentrated on textiles and clothing and later on electronics, watches, clocks and plastic goods. But, early in the 1980s, many of these industries moved across the border to take advantage of the low labour costs on the Chinese mainland. Since this transformation, the main industries in Hong Kong have changed to financial services, regional trade services, and tourism (Westlake 2001). Hong Kong has developed as an international financial and trade centre, and has the world’s 6th highest GDP per capita, supporting 33 percent of the foreign capital flows into China (Wikipedia 2004).

Currently, there are four key industries in the Hong Kong economy: financial services, trading and logistics, tourism, and producer and professional services. They have been the driving force of Hong Kong’s economic growth, providing impetus to the growth of other sectors, and creating employment.

1. Financial services cover a wide range of businesses including banking, insurance, stock brokerage, assets management, and other investment services.

2. Trading and logistics refers to import and export businesses that require the logistics process of planning, implementing and controlling the movement and storage of goods from the point of origin to the point of consumption. These activities include freight transport, freight forwarding, storage, postal and courier services. That is why trading firms are closely associated with logistics activities.

3. Tourism covers inbound tourism and outbound tourism. Inbound tourism is composed of retail trade, hotel accommodation services, food and beverage services, travel agency and passenger transport services, reservation services and related personal services provided to visitors to Hong Kong. Outbound tourism covers cross-boundary passenger transport and travel agency services provided to Hong Kong residents travelling abroad.

4. Producer services refer to services for use by other companies in the local economy as well as exports of services to companies and individuals. They are operated as service agents. However, professional services cover accounting, auditing, legal, architecture and engineering, technical testing and analysis,
scientific research and development, management and consultancy activities, information technology related services, advertising and design.

The above classification was based on information from the Census and Statistics Department of Hong Kong. Besides the four categories of key industries, there are another six groupings of industries identified by the government of Hong Kong as elements with potential for further development. They are described below:

1. Cultural and creative industries, which comprise different sectors including advertising, architecture, art, antiques and crafts, design, film, video and music, the performing arts, publishing, software, computer games and interactive media, and television and radio.

2. Medical services, which cover medical and healthcare services provided by private hospitals, clinics, medical and dental practitioners, nursing and residential care for the elderly and persons with substance abuse and disabilities as well as medical-related businesses including retail sales of medical products and medical insurance.

3. Education services, which cover kindergartens, private primary and secondary schools (both profit and non-profit oriented), tutorial schools, self-financed post-secondary and other tertiary education (including university courses for non-local students), and other education-related services such as training and continuing education provided to business people.

4. Innovation and technology, which cover not only research and development (R&D) but also activities that further drive product and process innovation in relevant organisations. The new or enhanced technologies and methods generated by R&D promote companies’ market competitiveness and business performance.

5. Testing and certification services, which cover business establishments engaged in technical testing and analysis, cargo inspection, sampling and weighing, and medical and X-ray laboratories as their major economic activities.

6. Environmental industries, which mainly include sewage and waste management, environmental engineering and consultancy services as well as trading and transforming of waste and scraps.
3.4.2 The Employment Situation during the GFT in 2008 and 2009

The GFT initially erupted in the United States in September 2008. In February of 2009 and shortly after the Lunar New Year holidays, people began to see certain adverse effects from the worldwide financial crisis on the local labour market. A wave of layoffs swept across all fields of business. According to the Census and Statistics Department of Hong Kong, the total employment figure of 2009 was down to 3,486,900 from 3,521,400 in 2008.

The following is general information about the distribution of labour among various industries of Hong Kong in the year of 2009. Of the total employment of 3,486,900 persons in that year, the four key industries (financial services, tourism, Trading and logistics, professional and other producer services) accounted for 47.3 percent (1,650,900 persons). The other six industries (cultural and creative industries, medical services, education services, innovation and technology, testing and certification services, and environmental industries) accounted for only 11.3 percent.

The abovementioned ten categories of industries made up about 60 percent of total employment in 2009. The remaining 40 percent included a number of unclassified fields of businesses and employees of the public and semi-public sectors (various government departments and agencies as well as statutory institutions).

According to labour force statistics released on May 19, 2009 by the Census and Statistics Department (C&SD), the seasonally adjusted unemployment rate increased from 5.2 percent in January–March 2009 to 5.3 percent (provisional figure) in February–April 2009. The under-employment rate increased from 2.1 to 2.2 percent (provisional figure) over the same period. The overall unemployment rate reached 5.4 percent in December 2009. By comparing the statistical figures of various years, it can be argued that over 4.6 percent unemployment is high because the Territory usually enjoyed less than 3.0 percent unemployment in years of normal economic conditions.
3.5 Sampling Design and Technique

The above section introduced the background, characteristics, and employment data of the survey object of employees in Hong Kong. This section will discuss the sampling process for the survey participants.

(A) Validity of the Sample

A sample is a subset of the population, and population means the entire set of objects in the survey research. Thus, a sample implies that the subset resembles the population closely on key characteristics and is able to represent the population under study. Governments, business communities, academic and scientific institutions frequently rely on information obtained from a sample to arrive at generalisations about the characteristics of a population, and the procedure used to attain the sample is called sampling. Thus, sampling is about getting a group to survey, which is enough like the population under investigation that valid generalisation can be made about the population on the basis of the sample (Sapsford 2007). In this research, the population is the general employees in Hong Kong so that a valid sample should cover employees of various businesses and industries.

(B) Sampling Methods

Table 4: Types of Sampling Design

<table>
<thead>
<tr>
<th>Representation Basis</th>
<th>Probability</th>
<th>Nonprobability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Element Selection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unrestricted</td>
<td>Simple Random</td>
<td>Convenience</td>
</tr>
<tr>
<td>Restricted</td>
<td>Complex Random</td>
<td>Purposive</td>
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<tr>
<td></td>
<td>Systematic</td>
<td>Judgment</td>
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<tr>
<td></td>
<td>Cluster</td>
<td>Quota</td>
</tr>
<tr>
<td></td>
<td>Stratified</td>
<td>Snowball</td>
</tr>
<tr>
<td></td>
<td>Double</td>
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</tbody>
</table>

(Source: Cooper & Schindler 2008)

In general, there are two major kinds of sampling methods (Table 4):
(1) **Non-probability Sampling** – the availability of subjects, convenience and personal judgement of the researcher are criteria that determine which sampling units are selected (Zikmund 2000).

(2) **Probability Sampling**– the process equalises the chances of any member of a population to be selected (Zikmund 2000). The mathematics of probabilities can calculate the likelihood of any given event when its occurrence is random so that this process is also called random sampling (Sapsford 2007). Thus, in order to represent a population more accurately, it is preferable to use probability samples.

The sampling approach of this research is not considered to be a probability sampling method, but neither is it a non-probability sampling method. As its sampling units are not selected on the basis of the personal judgment and desire of the researcher, the sampling approach in this survey study has ‘a minimum degree of randomisation’ in the distribution of respondents and may be deemed an ‘in-between’ sampling design of the above two approaches.

In the context of this research, the term ‘a minimum degree of randomisation’ is based on the following rationale: (a) the personal judgments and preferences of the researcher are not applied in this sampling process, (b) sampling units selection is not restricted to any specific persons, groups or specific districts of the territory, (c) sampling units are collected randomly without regard to their nature and characteristics (i.e. age, gender, job nature, job level, organisation, business nature, year of service etc.), and (d) the researcher had no knowledge about the sampling units beforehand. Generally speaking, the above criteria basically meet the general requirement of the “principles of valid sampling” as the sample is selected free from any interferences and desires of the researcher.

### 3.5.1 Sampling Rules

A valid and efficient sample is the key to generating true and correct results capable of generalising and representing the whole population. Sampling design aims to establish a workable sampling plan and select an appropriate sample size. The
sampling plan should firstly involve a decision to determine the size of the sample. There are several rules must be followed (Eckhardt & Ermann 1977):

(1) The sample size regarded as necessary mostly depends on the characteristics of the population. In a case where the population is homogenous, a sample of one member of the population is enough. If a study involves a heterogeneous population, a larger sample is appropriate. So, this research is in compliance with this rule.

(2) The size required also depends on the precision of the results desired. If the researchers wish to estimate closely the true values of the population from sample statistics, then a large sample is preferable, as precision will increase along with sample size. Conversely, sampling error decreases. However, if the researchers are satisfied with a bigger error, then a small sample will be fine.

(3) Lastly, the sample size also depends on the level of confidence that the researcher desires for his or her estimates. So, if the researcher desires higher levels of confidence, a large sample should be adopted. If the researcher desires a lower level of confidence, a small sample may be acceptable. So, this research is basically in compliance with the above rules.

As a general rule, a large sample is most likely to be representative of a population especially in quantitative research, but the administrative costs of data collection would be high (Eckhardt & Ermann 1977).

Solid sampling experiences can be seen in the Hong Kong context of social research. For example, Dr Robert Ting-Yiu Chung, Director of the Public Opinion Program of the University of Hong Kong, usually directs his survey team to maintain a sample size of around 1,000 citizens to represent the whole population of Hong Kong when conducting social and political surveys in the territory. This sample size of 1,000 is believed to be sufficient for generalising to the entire society of Hong Kong otherwise it would not be adopted in their researches. That is, up to a sample size of around 1,000, the gains in precision are noticeable (Bryman and Bell, 2003). Alternatively speaking, a national probability sample of 1,000 people in the United Kingdom, according to Bryman and Bell (2003), has as much validity as a national probability sample of 1,000 people in the United States, even though the latter has a much larger population. However, time and cost considerations become very relevant in this
context. For an individual researcher doing this survey regarding employees’ work attitudes, an actual sample of 1,000 employees would have been hard to attain based on the existing available resources. Hence, a smaller sample of 600 employees was aimed at in this survey.

3.5.2 Sample Size

On account of the sample attrition problem referred to by Selmer and Littrell (2004), their research sample size turned out to be small. The initial sample consisted of 115 managers, but was finally further decreased to only 31 persons. This problem somewhat affected the validity of their findings. Therefore, both the representability of their sample and the generalisability of their results are questionable. Learning from their experiences, the researcher for the present study decided to pursue a bigger sample size than theirs under somewhat similar economic and environmental situations to theirs. Thus, this researcher sought to achieve a higher validity in the study by adopting a sample size of 600. Based on the universal rule of statistics, it is always true that the larger the sample the better it will be. But there is a trade-off between precision and cost. With reference to Sapsford’s explanation (2007) about sampling error, it is understandable that researchers need to multiply their initial sample size by four in order to reduce the sampling error only by half. For example, the originally planned sample size of this survey was n=150, but the researcher then decided to augment the validity of the research by decreasing the sampling error by half so a sample size of 600 working people of various trades in Hong Kong has been adopted for this project. Eventually, after the data collection process, the actual sample was 562 people, which was very close to the desired number. A bigger sample size definitely requires a larger number of respondents. To improve the response rate would be the key for achieving the target sample-size, and this was made possible by effectiveness of the data collection process discussed at a later stage.

3.5.3 Sampling Frame

A sampling frame implies a list of the population from which the sample is to be drawn, for example, the member list of a specific industry. However, in this research,
there is no sampling frame because the objects of study are not in a specific group or association and they are the general workforce of various trades and industries in Hong Kong, so it is not possible to generate a list covering all members. Even though this research does not have a sampling frame, it is still able to apply some degree of the principles of random sampling as the sample is drawn free from any interferences of the researcher.

3.6 Questionnaire Design

The questionnaire design is based on the conceptual framework defining the proper connections among the research questions, hypotheses, and survey questions to ask the informants.

3.6.1 Questionnaire Development

Most of the time, a questionnaire is a self-completion instrument listing questions which informants answer by themselves. One of the most extensively researched and documented instruments to be used to measure job satisfaction is called ‘Job Descriptive Index’ (JDI), which is a questionnaire containing five distinct areas of interest: the work itself, supervision, people, pay, and promotion, with 72 questions altogether (Smith et al. 1969). Hence, the JDI is a good reference for developing job-related questionnaires. Even though the structure of the JDI has been confirmed by many researchers as a valid and reliable instrument, it still has certain shortcomings. The disadvantages of the JDI are that the actual questionnaire tends to be lengthy and that the broad category of ‘work’ does not provide much information regarding creativity, variety, independence, or other aspects of the work itself (Landy & Conte 2007). Besides the basic issues about job satisfaction, other job-related variables such as job involvement, affective commitment, P-O value fit, and withdrawal intention are not mentioned.

However, for including more behavioural variables, Selmer and Littrell (2004) in their longitudinal study of changing work values during the economic adversity of the Asian Financial Crisis from 1997 to 1998 adopted a better questionnaire using the 24-
item instrument originally developed by Elizur (1984). Several years later, Selmer and Waldstrom (2007) also constructed a questionnaire based on the same 24-item instrument in their research to measure the work values of surviving and non-surviving managers during an economic recession in Hong Kong. Likewise, this researcher is applying the same instrument in the ‘GFT Employee Work Attitudes Model’. The said instrument with 24 items of behavioural work variables will be clearly defined at a later stage in this section.

(A) Justification for adopting Elizur’s 24-item instrument together with Lankau and Scandura (1996)’s six dimensions of work behaviour in this questionnaire

Even though ‘Work Value’ and ‘Work Attitude’ are different, it is still acceptable to adopt the 24-item instrument to measure either one of them. It is analogous to a man utilising the same bathroom scale to measure his body weight himself and that of his pet dog. No one should argue about the fact that the studies of ‘Work Values’ or ‘Work Attitudes’ are all dealing with ‘Work Behaviours’. It is meaningless to challenge the usage of the same type of instrument in such studies. According to Borg (1986), the said instrument with 24 measuring items had been thoroughly tested in various cultural contexts. Hence, the researcher has no doubt that this instrument can be regarded as a powerful tool composed of work attitude objects for measuring work attitudes.

Nevertheless, this instrument still has one shortcoming because its design was originally for measuring work values. As described in the previous sections, the significant difference between values and attitudes is that values mainly talk about positive aspects, but attitudes talk about both positive and negative aspects. Thus, Elizur’s 24-item instrument can only match with Lankau and Scandura’s (1996) five dimensions of positive work behaviours; that is, ‘Job Satisfaction’, ‘Job Involvement’, ‘Affective Commitment’, ‘Continuance Commitment’ and ‘P-O Value Congruence’ but not the sixth dimension of negative work behaviour, ‘Job Withdrawal Intentions’. In order to address this deficiency and to comply with the main theme of the GFT work attitudes study, this researcher had to develop three attitudinal variables to match with this negative behavioural dimension. These three attitudinal variables are: “Tend to leave the organisation if workload is heavier than before”, “Tend to leave the organisation if salary is cut”, and “Tend to leave the organisation if benefits are
“Global Financial Tsunami Work Attitudes Model”.

Having added the above three attitudinal variables to match with the sixth dimension of work behaviour, the combined instrument can now deal with both positive and negative variables in order to effectively measure either work values or work attitudes in work behaviour studies. However, in the specially designed questionnaire of this research, the integration of Lankau and Scandura’s (1996) six dimensions of work behaviour mentioned above: such as ‘job satisfaction’, ‘job involvement’, ‘affective commitment’, ‘continuance commitment’, ‘P-O value congruence’, and ‘job withdrawal intentions’, together with Elizur’s twenty four measuring items explained below, provides an even better instrument for measuring employees’ work attitudes in the context of an economic recession under the shadow of the ‘global financial tsunami’ in Hong Kong. The reason is that equipped with 24 ‘work attitude measuring items’, Elizur’s instrument has already been widely adopted by work value or work attitude researchers, and its integration with Lankau and Scandura’s (1996) six dimensions of work behaviour in this ‘GFT Work Attitudes Model’ will further enable a wider scope of perspectives on measuring employees’ work attitudes and related work behaviours.

(B) Three Types of Factors (the independent, intervening, and dependent variables) constituting this Questionnaire

In this model, those work attitude measuring items have been re-classified and re-grouped under the abovementioned six dimensions of work behaviour. In the construct of the contents and elements of the questionnaire, the researcher has to meet the objective of the study by a logical selection of three environmentally related variables, namely ‘Belief about the damage due to the Global Financial Tsunami’, ‘Organisational Decline’ and ‘Organisational Downsizing’, each of which is commonly seen during economic adversities and is assumed to have impacts on employees’ work attitudes based on the theories from the literature review. Thus, these three environmentally-related factors / variables become three independent variables in this ‘GFT Employee Work Attitudes Model’. In addition to the three independent variables (see Figure 20), this special questionnaire now also covers six dependent variables of the six dimensions of work behaviour together with 27
intervening variables (Elizur’s 24 items plus 3 items of ‘job withdrawal intentions’ developed by the researcher) making nine sub-sections from I to IX that are in the same order as on the actual questionnaire.

(Please note: In the items below, the statements inside the brackets are interpretations of the 27 items of employees’ work attitudes which form the contents of the specially-designed questionnaire for this survey. For clarification, please refer to the questionnaire and Appendix III.)

I. **Job Satisfaction**—there are 13 ‘work attitude measuring items’ (‘work attitude objects’) to measure employees’ work attitudes regarding their job satisfaction during the economic recession under the ‘global financial tsunami’. Respondents were asked to what extent they agreed/believed or disagreed/disbelieved the following statements regarding their work attitudes toward this specific work behaviour – “job satisfaction”.

1. Advancement or chance for promotion – (“There are chances for advancement or promotion in Economic Downturn”)
2. Achievement, in work – (“Many achievements in work can be attained in Economic Downturn”)
3. Job interest, to do work which is interesting to you – (“My job interest is high in Economic Downturn”)
4. Meaningful work – (“Meaningful work can be attained in economic downturn”)
5. Opportunity for personal growth – (“Opportunity for personal growth is available in economic downturn”)
6. Recognition for doing a good job – (“Recognition for doing a good job is attainable in economic downturn”)
7. Esteem: that you are valued as a person – (“Job esteem is attainable in economic downturn”)
8. Opportunity to meet people and interact with them (“Opportunity to meet people and interact with them can be attained in economic downturn”)

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9. Pay, the amount of money you receive – (“I accept a pay cut instead of layoff if my organisation is downsizing”)
10. Benefits, vacation, sick leave, pension, insurance, etc. – (“I am willing to accept benefits cut if my organisation is declining”)
11. Job security-permanent job – (“Job security is unaffected by economic downturn”)
12. Convenient hours of work – (“Convenient hours of work to fit my personal schedule is needed in economic downturn”)
13. Work conditions, comfortable and clean – (“Comfortable work conditions are attainable in economic downturn”)

II. **Job Involvement** – there are three ‘work attitude measuring items or work attitude objects’ to measure employees’ work attitudes regarding their job involvement during the economic recession under the ‘global financial tsunami’. Respondents are asked to what extent they agreed/believed or disagreed/disbelieved the following statements regarding their work attitudes toward this specific work behaviour – “job involvement”.

1. Job status – (“I am concerned about job status – job title, workload and work hours”)
2. Use of ability, and knowledge in your work – (“I endeavour to use my ability and knowledge to work for my organisation”)
3. Influence in work – (“I will try to influence co-workers to work positively in times of adversity”).

III. **Affective Commitment** – there are two ‘work attitude measuring items or work attitude objects’ to measure employees’ work attitudes regarding their affective commitment during the economic recession under the ‘global financial tsunami’. Respondents were asked to what extent they agreed/believed or disagreed/disbelieved the following statements regarding their work attitudes toward this specific work behaviour – “affective commitment”.

- 92 -
1. Responsibility – (“I am willing to take additional responsibilities during difficult times”)
2. Independence in work – (“I don’t mind without the assistance of helpers or subordinates”).

IV. **Continuance Commitment** – there are two ‘work attitude measuring items or work attitude objects’ to measure employees’ work attitudes regarding their continuance commitment during the economic recession under the ‘global financial tsunami’

Respondents were asked to what extent they agreed/believed or disagreed/disbelieved the following statements regarding their work attitudes toward this specific work behaviour – ‘continuance commitment’.

1. Feedback, concerning the results of your work – (“Feedback – concerning the results of work is important in adversity”)
2. Contribution to society – (“Avoiding making errors at work against loss is to the benefit of society”).

V. **P-O Value Congruence** – there are four ‘work attitude measuring items or work attitude objects’ to measure employees’ work attitudes regarding their P-O value congruence during the economic recession under the GFT. Respondents were asked to what extent they agreed/believed or disagreed/disbelieved the following statements regarding their work attitudes toward this specific work behaviour – “p-o value congruence”.

1. Company: to be employed by a company for which you are proud to work – (“To match personal and organisational values (esteem) is important in adversity”)
2. Influence in the organisation: (“My loyalty to work is able to influence others in the organisation”)
3. Co-workers, fellow workers who are pleasant and agreeable – (“Pleasant and agreeable attitudes among co-workers are important”)
4. Supervisor: a fair and considerate boss – (“Fair and considerate boss can lead people to get through adversity”).

VI. **Job Withdrawal Intention** – there are three ‘work attitude measuring items or work attitude objects’ to measure employees’ work attitudes regarding job withdrawal intentions during the economic recession under the ‘global financial tsunami’. Respondents were asked to what extent they agreed/believed or disagreed/disbelieved the following statements regarding their work attitudes toward this specific work behaviour – “job withdrawal intention”.

Notably, ‘Job Withdrawal Intentions’ is the negative work attitude. In addition to Elizur’s 24 positive ‘work attitude measuring items or work attitude objects’ adopted in the above five dimensions (from I to V), the following three negative ‘work attitude measuring items or work attitude objects’ were developed for this sixth dimension as shown below:

1. “During economic recession, I tend to leave the organisation if my workload is heavier than before”. This question measured employees’ work attitudes about whether they wanted to leave the organisation under less favourable work-terms in the time of the ‘global financial tsunami’.
2. “During economic recession, I tend to leave the organisation if my salary has been cut”. This question measured employees’ work attitudes about whether they wanted to leave the organisation under less favourable work-terms during the time of ‘global financial tsunami’.
3. “During economic recession, I tend to leave the organisation if my benefits have been cut due to poor business results of the organisation”. This question measured employees’ work attitudes
about whether they wanted to leave the organisation under less favourable work-terms during the time of ‘global financial tsunami’.

At this point, a total of 27 ‘work attitude measuring items’ or intervening variables (24 ‘work attitude measuring items’ under sub-sections I to V, and three ‘work attitude measuring items’ under sub-section VI) have been identified above.

In contrast to the above, the following are three independent variables (the environmentally related factors / variables as mentioned previously) being defined under sub-sections of VII, VIII and IX.

VII. **Belief about the Damage due to the GFT**

“Do you believe the damage due to the global financial tsunami can change your perspective toward your well-being in the workplace?” This question measured how this independent variable affected the employees’ work attitudes toward the six dimensions of work behaviour.

VIII. **Organisational Decline** during economic recession under the GFT

“Organisational decline generally means a continuous down-turn of organisational performance, i.e., suffering from diminishing revenues as well as shrinking market shares. Do you agree this kind of phenomenon affects your attitudes / feelings in the workplace?” This question measured how this independent variable affected employees’ work attitudes toward the six dimensions of work behaviour.

IX. **Organisational Downsizing** during economic recession under the GFT
“Organisational downsizing generally refers to a reduction of the personnel or the manpower size and re-design of the workflow. Do you agree this kind of phenomenon affects your attitudes / feelings in the workplace?” This question measured how this independent variable affected employees’ work attitudes toward the six dimensions of work behaviour.

The design of the above questions has met the guidelines necessary in a successful questionnaire: (1) clear, unambiguous questions in which the wording is simple and easily understandable, (2) standardisation of presentation, to ensure that every respondent is asked exactly the same questions in the same order, (3) coding the data for subsequent analysis is done in a trustworthy, efficient and preferably, cost-effective manner (see Figure 17 on page 99).

All questions have been modified but mainly are still based on the concepts of the abovementioned six dimensions of work behaviour while matching the meanings of the three main hypotheses (but Hypothesis One and Hypothesis Three have been broken down into three sub-hypotheses) and two job-related hypotheses that the researcher has discussed previously. In order not to mislead respondents, the researcher used simple and short questions / statements in the questionnaire so as to enable people to understand more easily.

Besides the cover letter, the survey questionnaire had five pages. The first page began with brief descriptions of the survey and simple demographic questions to ask the respondents. The other four pages contained both closed and open-ended attitudinal questions. For the closed questions, respondents had to choose from a set of alternatives determined by the researcher. With this type of question, the respondent is required to choose the one answer that best describes his/ her attitude towards the situation described in the question. Yet, the open-ended questions allow respondents to answer however they wish so that the respondents can freely express their views regarding the topics of concern.

The second, the third and the fourth pages comprised thirty short closed questions under the six dimensions of work behaviour, as mentioned in the previous paragraphs.
The fifth page contained two open-ended questions asking people to express their views as to how the ‘global financial tsunami’ had impacted on them. With the exception of the two open-ended questions, all the thirty closed attitudinal questions used a seven-point Likert Scale as described below:

1 = strongly disagree/disbelieve
2 = quite disagree/disbelieve
3 = slightly disagree/disbelieve
4 = neutral
5 = slightly agree/believe,
6 = quite agree/believe
7 = strongly agree/believe.

The source of the above-scaled pattern was from *Career Salience* (Sekaran 1986). Therefore, respondents were asked to indicate, using the above scale, the extent to which they agreed with the attitude expressed in the closed questions in this survey questionnaire. The original layout was modified on advice from Dr. Raymond Cheng. (See Appendix XI for the final version of Questionnaire).

3.6.2 Questionnaire Translation

The translation of the questionnaire from English into Chinese was necessary because the target respondents included different levels of employees and many of them may not have understood English. After the draft of the Chinese version had been carried out, a backward translation from Chinese into English was performed in order to improve the reliability of the meanings contained in the questionnaire. It was expected that the wording for both versions would not contradict with each other, and the intended meanings would not mislead the respondents when the actual survey process took place. In respect of the said translations, the assistance and guidance from Dr. Y.Y. Wong, Professor of International Business, School of Business Management of San Francisco State University, was very helpful. Most importantly, the former supervisor Dr. Raymond Cheng’s final review and comments were crucial for enhancing the validity of the questionnaire for this survey research.
Figure 17: Development of the ‘Work Attitudes Questionnaire’

Six work behaviours adapted from Lankau & Scandura (1996)

Work Attitudes Measuring Instrument (24 items) adapted from Elizur (1984)

Elizur (1984) only deals with positive behaviours. The researcher further developed 3 items as below:
(Source: Developed for this research)
3.6.3 The linkages between research questions, survey questions and hypotheses

Generally speaking, the design of this survey questionnaire was aimed at the ultimate goal of studying employees’ work attitudes under the influence of the GFT. Therefore, it is important to identify connections between the environmental factors of the GFT, employees’ work attitudes, and their related work behaviours.

Table 5: Connections between Research Questions, Hypotheses, and Survey Questions

<table>
<thead>
<tr>
<th>Research Questions (RQ)</th>
<th>Hypotheses (H)</th>
<th>Survey Questions (Variables)</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ 1. Do the environmentally related factors (belief about the damage due to the global financial tsunami, perceptions about organisational decline, and perceptions about organisational downsizing) influence people’s work attitudes?</td>
<td>H1. Environmentally related factors did not influence people’s work attitudes.</td>
<td>Independent Variables</td>
</tr>
<tr>
<td></td>
<td>(H1a.) Belief about the damage due to the global financial tsunami did not influence people’s work attitudes.</td>
<td>The following are Survey Questions on Questionnaire:</td>
</tr>
<tr>
<td></td>
<td>(H1b.) Organisational decline did not influence people’s work attitudes.</td>
<td>VII. on Questionnaire (BFT)</td>
</tr>
<tr>
<td></td>
<td>(H1c.) Organisational downsizing did not influence people’s work attitudes.</td>
<td>VIII. on Questionnaire (ODC)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IX. on Questionnaire (ODS)</td>
</tr>
<tr>
<td>RQ 2. Do people’s work attitudes influence their work behaviours?</td>
<td>H2. Employees’ work attitudes had no influence on their work behaviours.</td>
<td>Intervening Variables</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Survey Questions on Questionnaire:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I. (JS 01-13)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>II. (JI 14-16)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>III. (AC 17-18)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IV. (CC 19-20)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>V. (PO 21-24)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VI. (JW 25-27)</td>
</tr>
<tr>
<td>RQ 3. Do the environmentally related factors influence people’s work behaviours through the mediation of work attitudes?</td>
<td>H3. The relationship between environmentally related factors and employees’ work behaviours is not mediated by work attitudes.</td>
<td>Dependent Variables</td>
</tr>
<tr>
<td></td>
<td>(H3a.) The relationship between belief about the damage due to the global financial tsunami and people’s work behaviours is not mediated by related work attitudes.</td>
<td>(Survey questions specifically dealing with the 6 dimensions of employees’ work behaviour are shown on Employer/HR manager/Department Head’s questionnaire)</td>
</tr>
<tr>
<td></td>
<td>(H3b.) The relationship between</td>
<td></td>
</tr>
</tbody>
</table>

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organisational decline and people’s work behaviours is not mediated by related work attitudes. 
(H3c.) The relationship between organisational downsizing and people’s work behaviours is not mediated by related work attitudes.

| RQ 4. Is there any association between Job satisfaction and Job withdrawal intention? | H4. There is no association between job satisfaction and job withdrawal intention. | This is an additional test about job satisfaction and job withdrawal intention as both variables are assumed to be closely related. |
| RQ 5. Is there any association between Affective commitment and P-O value congruence? | H5. There is no association between Affective commitment and P-O value congruence. | This is an additional test about Affective commitment and P-O value congruence as these variables are assumed to be closely related. |

(Source: Developed for this research)

### 3.7 Data Collection

#### 3.7.1 Source of Data

Data can be obtained from three sources: primary, secondary and tertiary. Primary sources supply new and first-hand data that are collected by the researcher from informants and respondents answering certain specific questions in respect of the research interest for the stated purpose of the attitudinal study. In other words, primary sources are original works of research or raw data without interpretation. Data from secondary sources includes existing information and records such as encyclopedias, journals, magazines and books, corporate annual reports, government publications, economic indicators and industrial reports (Cooper & Schindler 2008; Zikmund 2000). Tertiary sources refers to information that has been analysed by the researcher or other analysts who previously studied the secondary data after having generated results from the analysis. This is because the raw data may not be available, or they may be interpretations of secondary source. Such kinds of data are mainly the reports of analysis on statistical figures provided by government agencies and public institutions (Blaikie 2003; Cooper & Schindler 2008).
In this research, the collection of primary data from general employees was the best choice for answering the specific attitude questions of the study. In addition, secondary data included materials collected from the literature review including examples of facts, figures and theories, and tertiary data from industrial reports and economic indicators from the Census and Statistics Department of Hong Kong. After all, the primary data will constitute the major and key portion to answer the research questions of this study.

**Potential Channels to the Sources of Primary Data**

Primary data in this study are from the general employees of Hong Kong. To ensure a bigger representation of the general workforce in the local society, the initially planned sample-size of n=150 was expanded to 600 employees (n=600) from various fields of businesses in Hong Kong. The channels to reach these people were the two largest labour unions of Hong Kong. Firstly, the Hong Kong Federation of Trade Unions is the largest labour union or employees’ organisation in Hong Kong. It was founded in 1948, and now has 176 affiliated unions and 49 associated unions, representing about 300,000 working people from different fields covering all walks of life. Secondly, the Federation of Hong Kong and Kowloon Labour Unions was established in 1984, and presently has 64 affiliated unions and 10 sponsoring associations with total membership exceeding 40,000. To ensure validity, it was decided to adopt a random-sample selection strategy by choosing union membership numbers with the use of a random number table.

Besides the above two unions, the researcher had planned to collect random samples from a number of locations in a street survey. A couple of business conglomerates were also targets for data collection because those corporations usually had a network of subsidiary companies ranging from real estate development, energy supply, hotel operations, and travel services to public transportation, employing a large number of local citizens. The researcher planned to try with the utmost effort to contact such corporations by writing and visiting their HR managers. For example, indirect connections were assumed to be made through the ‘Personnel Managers Club’ under the Workplace Consultation Promotion Division of the Labour Department. Additional sources of primary data were some associations which could be contacted.
more easily due to *guanxi*, a popular Chinese term for the complex personalised networks of influence and social relationships in Chinese society (Hollensen 2010).

**Resources for Data Collection**

The preliminary budget for this Project was about HK$30,000.00, mainly for luncheon meetings and dinner gatherings with friends and acquainted persons for inviting and recruiting suitable data-collection assistants. With regard to the recruitment of voluntary survey assistants, the researcher initially expected to acquire about three voluntary survey assistants whose duties were to be dispatching questionnaires and explaining the questions to the respondents. In compliance with this plan, a training program was to be provided for them with clear instructions and guidelines. Their duties included coordinating with interested organisations, mailing and dispatching questionnaires, helping the researcher in the classification of raw data as well as coding and running the SPSS program.

Other resources were expected from the ‘Personnel Managers Club’ in the Workplace Consultation Promotion Division of the Hong Kong Labour Department

1. Expecting and requesting the assistance from the Club for dispatching the questionnaire to its members for a pilot test.

2. Requesting the Club to issue a letter of invitation to a couple of corporations for their possible participation in this survey.

Since the researcher is a member of the abovementioned ‘Personnel Managers Club’, the organiser of the club eventually rendered some degree of assistance in respect of the aforesaid requests.

3.7.2 Data Collection Method

There are basically three types of data collection methods: observation, experiments, and survey methods. Each of these methods follows the criteria of its original research design. For example, the survey method of data collection closely attaches to guidelines of the survey research design. Similarly to the longitudinal method, survey research uses a cross-sectional design. However, in the latter case, data are collected at a single point in time, over more than one case. A body of quantitative or
quantifiable data is collected by means of predominantly questionnaires or by structured interviews. Data can then be examined in order to identify patterns of association (Bryman & Bell 2003). Typically, data collection under a survey research design may use a number of different methods: personal interviews, telephone interviews, mail surveys, internet surveys, or a combination of approaches. In this research, a combination of the above methods was applied in a pilot test shortly before the beginning of the actual data collection process.

3.7.3 Pilot Test

The questionnaire developed for this research had first to be composed, tried out and improved until it could do the job required. In the overall research process, it was possible that many things could go wrong. A pilot test can detect potential errors in the design, or unforeseen environmental and circumstantial phenomena (Cooper & Schindler 2008). Once the design of the questionnaire in both English and Chinese versions had been completely constructed, the researcher expected in the pilot test to select a data collection method that best fitted this survey study. Since it is dangerous to make assumptions about how the respondents would react when encountering the pre-set questions, the pilot test was deemed to be a simulation of the survey so that unexpected technical problems would be detected at an early stage, and subsequent adjustments, modifications and refinements could be made prior to the actual survey. In general, the pilot test not only focuses on the construct and contents of the questionnaire but also helps to evaluate different types of survey approaches. The pilot test began with a small number of people taken from the same population as the planned sample of this research.

Results and Experiences from the Pilot Test

(1) Questionnaire Format, Layout and Wording
In twelve face-to-face interviews, respondents were firstly asked to express their opinions about the layout, content and wording of the questionnaire. All feedback appeared to be positive as all twelve respondents considered the layout, content and wording were good and understandable. Hence, such interviews were quite smoothly processed. However, face-to-face interviews were used for testing the questionnaires
only. In fact, face-to-face surveys are too costly and time consuming. Therefore, it is not possible to rely on face-to-face interviews to generate enough respondents when the desired sample size is 600.

(2) Computer on-line Survey
A free on-line survey questionnaire from the website of the information technology consulting firm RFORM was used, available from: www.my3q.com. Only an enrolled member is able to access to its services. With the contents of the existing questionnaire to its program in October 2010 having been uploaded over the Internet and its instructions having been followed step by step, an electronic questionnaire was then set up on the website. The target informants are usually students and persons who are interested in the issue or topic of the survey and are able to use a computer. Thus, it was not possible to obtain a random sample of general employees to this electronic survey. A low response rate was expected in the beginning. But the results were even far below expectations as only four respondents were generated in two months.

(3) Telephone Interviews
Having randomly picked 30 Chinese surnames preceded by the initials K.C. (popular initials of Chinese given names: e.g., K. C. Chan, K. C. Lee, K. C. Pang, and K. C. Wong) to search for their telephone numbers from a local telephone directory on 19 September 2010 (see Figure 18 on page 107), the researcher and his assistant interviewer encountered many refusals or unconnected calls, and finally got only three persons who were willing to be interviewed. Only one person finished answering the questions; the other two withdrew halfway through. The poor result was not surprising since a survey with over 20 questions over the phone would make people impatient. So, this trial demonstrated the weaknesses of telephone interviewing. In summary, there were phone numbers which were either inaccurate, or non-functioning, and the considerations of interview length, complexity of questions, and ease of interview termination by the participant caused problems.

Another telephone trial was made a week later. Six persons were randomly picked for interviews, but their names were from the researcher’s own phone book. They were either friends or relatives so five interviews were completed and only one was not
because the potential respondent was busy. Even though five respondents completed the telephone interviews, almost all of them complained about the time-consuming nature of this type of interview. In a couple of instances, they could not clearly hear each sentence or word read by the interviewer over the phone so that repetition was necessary to ensure correct answers from them. In this survey, ‘yes’ or ‘no’ questions are absent; therefore, telephone interviews with long questions/statements were not found to be appropriate after evaluating the results of this pilot test.

(4) Street Interviews
In the afternoon of 26 September 2010 (a Sunday), a street interview trial took place at the main entrance of Jusco, a big department store on Hong Kong Island. People usually go shopping after lunch during the holiday period. The scene was busy and noisy on that day as many phone-service promoters and members of political parties were selling their products or ideas in front of the main entrance of the store. The researcher and an assistant started at 2:00 pm to approach people. Only five people were willing to participate in the survey after more than thirty people had been approached in three hours. Many of these people suspected they were being solicited for a sales promotional activity. Eventually, three people took part in the survey and completed the whole interview, but the other two answered less than one-third of all questions and then gave up because of the length of time was beyond their patience. Hence the trial showed that the street interview approach was totally unsuccessful. The main reason was that most people were usually in a hurry in the streets before or after shopping, and they were not prepared for a sudden interview in the streets. Notwithstanding the soundness of the questionnaire, the trials of the above three types of survey were found to be ineffective as reflected by the results of the overall pilot test.
Figure 18: Hong Kong Telephone Directory

Table 6: Experiences and Results from the Pilot Test

<table>
<thead>
<tr>
<th></th>
<th>Layout</th>
<th>Content</th>
<th>Wording</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) About the Questionnaire: Comments reflected from 12 face-to-face interviews</td>
<td>acceptable</td>
<td>positive</td>
<td>understandable</td>
</tr>
<tr>
<td>(2) Computer-online-survey</td>
<td>low</td>
<td>low</td>
<td>medium</td>
</tr>
<tr>
<td>(3) Telephone interviews</td>
<td>low</td>
<td>high</td>
<td>low</td>
</tr>
<tr>
<td>(4) Street interviews</td>
<td>medium</td>
<td>high</td>
<td>low</td>
</tr>
</tbody>
</table>

(Source: Developed for this research)

In view of the results from the pilot test (see Table 6 above), it was believed that a computer on-line survey, telephone interviews and street interviews would not be efficient and effective. As a result, such approaches were not applied in this research. Since the above data collection methods were not successful in the pilot test, the researcher decided to utilise, in the main, a mail survey with strong support from the “multi-level dispatchers/collectors” to handle the questionnaires for data collection.

3.7.4 First Data Collection

*Mail Survey assisted by ‘Multi-level Dispatchers/Collectors’ Approach*

The data collection process is as follows:

(1) Contacting the Targeted and Acquainted Organisations:

Initially, a formal ‘Invitation Letter’ designed for both individuals and organisations was sent through regular mail to each of the targeted organisations, including organisations with which the researcher was already acquainted, to invite their participation in this survey. Targeted organisations included two publicly listed conglomerates and two labour unions. The targeted organisations also included several business and public entities in which the researcher had maintained personal or business relationships with their key members. In the formal letter sent to them, the
objectives of the survey and its social contributions were clearly outlined, and the confidentiality of data was assured. In addition to the above invitation letter, the researcher also sent out a specially designed letter in which the wording was slightly different from one organisation to another. This second letter described how the survey was relevant to issues which specifically concerned the organisation and how their support would be important to the researcher’s final conclusion. For demonstrating the sincerity of the researcher as well as explaining the importance of the survey, telephone follow-ups were done to contact the key persons in cases where the researcher was acquainted with them so as to obtain their support for this project. If requested by a particular organisation, another invitation letter would be drafted to encourage their members’ participation. Additionally, copies of the questionnaire were provided for their mail-outs, and stamped, prepaid envelopes with return addresses were enclosed with the cover letters. To enhance the effectiveness of the survey, some public relations work was carried out in advance; for example, by paying visits to district councillors for referral to key persons of several organisations. Usually, many district councillors were willing to provide citizens with legal and social services, especially for voters of their own districts. Since the purpose of this research partly involved the public interest and social responsibility, one councillor tried to help with forming relationships between the researcher and a few organisations. (See Appendix Eight for the proposed Invitation Letter to the potential organisations).

Although a lot of work was conducted with respect to communicating with organisations, the researcher received no encouraging responses at all. For example, the chairperson of the “Import and Export Workers’ Union (HKUCWWSE 香港洋務工會)” orally replied that their organisation had seriously considered the survey invitation but found no prior example of this kind of survey by an outsider being approved in their union’s history. One publicly listed corporation said they were sceptical about a possible political motive for this survey so it was hard for them to be convinced to participate. Lastly, only certain key persons of several organisations with whom the researcher was acquainted became the final targets for personal contacts, and luckily eight of them provided some kind of support in the survey. The names of the organisations giving help or participating in the survey are available if
requested, but subject to their final consent. Eventually, it was estimated that at least 25 per cent of the 562 respondents were from eight organisations. The following section describes another approach in the data collection process.

(2) Developing additional collection channels in HR events and social gatherings. The traditional channels for collecting primary data from employees can be through human resources managers of various industries and membership lists of trade unions. The further use of social and personal relations can be an alternative channel. Because responses from unions and conglomerates were not encouraging, the researcher had to look for other ways to invite interested individuals to participate in the survey through different meetings and gatherings. For example, in the human resources managers’ HRM Club meeting organised by the ‘Workplace Consultation Promotion Division’ of the Hong Kong Labour Department on 9 August 2010, twenty-four out of seventy-five members showed an interest in participating in the survey. These 24 members were all human resources managers representing twenty-four different organisations. But, in the meeting, they completed the questionnaire and only expressed their own work attitudes.

At a later stage, and based on the same work-attitude questionnaire, these human resources managers were also asked to express their views regarding the six dimensions of work behaviour of their employees. Having observed their employees’ work attitudes through their appraisal records, these human resources personnel were capable of measuring and predicting their employees’ work behaviours in relation to the impacts of the GFT.

(3) Expanding the Network of Informants by Using Marketing Ideas. In order to meet the target sample size of 600, it was necessary to expand the network of informants. One way to collect data was to invite friends, relatives, colleagues, neighbours, and schoolmates to participate. The major criterion was that each of these participants had to be employees or working persons in Hong Kong. In other words, the target population was the general workforce of the Hong Kong Special Administration Region (SAR).
Since this study did not focus on a specific group of working people, every member of different working sectors was eligible to be an informant. In order to expand the network of informants, the researcher studied some ideas from Amway’s ‘networking marketing’ technique. This technique is also called ‘multi-level marketing’. It is used for selling products by new distributors introduced to the company by existing distributors. In certain respects, it is similar to ‘referral marketing’, which means a relationship marketing plan stimulating referrals and advocates on the principle that the best form of marketing is to get the customer to do it (Buhler & Nufer 2010).

The concept of relationship marketing (RM) is similar to the Chinese guanxi, being a special type of relationship that bonds the exchange partners through the continual cooperation and exchange of favours. Sometimes human relationships and business relationships are quite blurred; that is, business relationships can develop from friends and acquaintances (Hollensen 2010). According to Jobber’s case study of Guinness (2010), the beer producer launched a comprehensive relationship marketing program in 2004. This aimed at increasing the loyalty and lifetime value of consumers by strengthening its relationship with publicans and customers to attract new drinkers, eventually obtaining an award-winning result.

However, relationship marketing is one of the many marketing strategies used by marketers for promoting sales and expanding market coverage. In fact, distribution of goods is still dominated by the typical intermediaries of wholesalers and retailers (Figure 19 below).
The concepts from the above marketing techniques and distribution structure can be utilised to improve the existing strategies of data collection. Hence, in this research, the distribution of survey questionnaires was made through the channels of friends’ friends, relatives’ friends, colleagues’ friends and so forth. Of course, the researcher became the first-level questionnaire dispatcher/collector. Additional support came from 28 individuals who were direct friends, relatives or colleagues of the researcher and were the second-level questionnaire dispatchers/collectors. Before distribution of the survey forms, these helpers received instructions from the researcher regarding the rules and techniques to contact their friends and relatives or acquaintances to do the survey. Firstly, each of the second-level assistants had to complete a questionnaire and make sure they understood its contents. Immediate feedback to the researcher was necessary in case of any doubts. Meanwhile, stamped, prepaid envelopes with return addresses on them are available for the assistants if they wanted to mail out questionnaires to their personal mailing lists. These 28 second-level assistants were responsible for dispatching and explaining the questionnaires to their informants.
Twenty-six of them each dispatched survey forms ranging from 5 to 25 copies. Two of them dispatched 35 surveys and 45 surveys respectively. It is known that they were distributing survey forms through the use of the third-level dispatchers. All dispatchers also needed to collect, follow-up and check the questionnaires filled in by their own informants. Therefore, the network expanded, and it was wide enough to cover the whole territory of Hong Kong, even though it was not evenly spread. Because enough time was allowed for the respondents, and also thanks to the follow-ups from all of the dispatchers/collectors, this survey succeeded in a return of 562 questionnaires, 515 of them fully completed. The other 47 were fully completed in the work-attitude sections and partially completed in the demographic section. Thus, these 47 pieces were still useful because they reflected the work attitudes of those employees.

In the whole data collection process, a total of 800 questionnaires were dispatched and 562 were returned, which meant a response rate of 70.25 percent. This is a very high response rate for a social and business survey, and it proves that this ‘multi-level dispatchers/collectors’ method is quite effective, but perhaps only for this type of ‘general employees’ survey. The high response rate can be attributed to the guanxi principle, where participating organisations and individual informants form a network of multi-level personal relationships. The connections between the researcher, friends and relatives are viewed as first-level relationships, and friends’ friends and their relatives as second-level relationships and so forth. As administrator of the questionnaire, the researcher was the ‘first-level dispatcher/collector’; his friends and relatives were ‘second-level dispatchers/collectors’, and finally friends’ friends and their relatives were ‘third-level dispatchers/collectors’ (see Figure 20 below). Because of the functioning of these particular guanxi relationships, people usually found it difficult to refuse to fill out the questionnaire as the request came from their friends and relatives.

In summary, the data collection process started with invitation letters mailed to all targeted organisations including some organisations with which the researcher was already acquainted. If they agreed to participate in the survey, they would usually ask for a number of questionnaires accompanied by an equal number of stamped, prepaid envelopes. For confidentiality reasons, it was impossible for them to provide a
mailing list to the researcher. In this survey, the maximum number of questionnaires handled by each of these organisations was 50, and the minimum was only 20. The contact persons of these participating organisations were mostly friends of the researcher. Based on a kind of guanxi, they promised to send out and follow-up with the questionnaires. In a sense, they could also be regarded as the second-level dispatchers/collectors.

Figure 20: Multi-level Dispatchers of Survey Questionnaires
(The Concept from Multi-Level Marketing which relates to (RM) Relationship Marketing)

Note: The direct relationships between the researcher and his friends, relatives and colleagues are the first level relationships. The relationships between the researcher’s friends and their friends or relatives are the second level relationships. That is, these two types of relationships constitute three levels of dispatchers. Besides the researcher, other dispatchers are also informants as they have already filled out the questionnaire themselves.
(Source: Developed for this research)

Apart from the unsuccessful attempt of the computer on-line survey, telephone interviews, and street interviews, the remaining approach was a “mail survey”. Bryman and Bell (2003) point out that one of the most damaging limitations of mail surveys is low response rates. But, in this research, it is evident that the approach of “mail survey assisted by multi-level dispatchers/collectors” can improve the response.
The following table constitutes a comparison between an ordinary “mail survey” and this new approach.

Table 7: Mail Survey and Mail Survey assisted by ‘multi-level dispatchers / collectors’

<table>
<thead>
<tr>
<th>Comparative factors</th>
<th>Mail Survey</th>
<th>Mail Survey assisted by Multi-level Dispatchers / Collectors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>Low</td>
<td>Average – mainly for gatherings and meetings with friends and relatives.</td>
</tr>
<tr>
<td>Processing time</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Speed of collecting data</td>
<td>Slow</td>
<td>Fast (advantage 1)</td>
</tr>
<tr>
<td>Respondent cooperation</td>
<td>Moderate</td>
<td>Very good (advantage 2)</td>
</tr>
<tr>
<td>Possibility of misunderstanding</td>
<td>High</td>
<td>Very low (advantage 3)</td>
</tr>
<tr>
<td>Sample size coverage</td>
<td>Large</td>
<td>Medium</td>
</tr>
<tr>
<td>Ease of follow-up</td>
<td>Difficult</td>
<td>Easy (advantage 4)</td>
</tr>
<tr>
<td>Non-response</td>
<td>High</td>
<td>Extremely low (advantage 5)</td>
</tr>
</tbody>
</table>

(Source: Developed for this research)

The above results are actual experiences from this survey research. It is apparent that this new approach has at least five advantages over a traditional mail survey approach (see also Figure 21 below).
Figure 21: Multi-level Dispatchers/Collector Approach

First level – the researcher
Second level – friends & relatives
Third level – friends’ friends & relatives

Note: It is apparent that the base of respondents will expand to a certain extent.

(Source: Developed for this research)

The Functions of the ‘Multi-level Dispatchers/Collectors’ Approach
The target population is widely spread throughout Hong Kong Island, Kowloon Peninsula, and the New Territories. A wider spectrum of sampling was achieved because the dispatchers were geographically located at different spots of the Hong Kong Special Administration Region (Figure 22, p. 117).

In some cases, the dispatchers could also act as survey assistants to explain and help respondents with completing the questionnaire. For example, some lower working-class people are illiterate. The presence of these assistants helped avoid bias from responses due to certain respondents’ lower fluency and poor understanding of the questions. The use of dispatchers was far better than the process of postal questionnaires alone. For mail surveys, there is no one to explain what a particular question means or to help the respondents to clearly understand what is required in answering the questions, especially in the case of lower working-class people unfamiliar certain issues. There will be more ‘spoiled’ responses and returns based on an unknown amount of misunderstood information. In addition, non-response rates are typical with postal surveys. However, in this survey, certain dispatchers could act as interviewers after being instructed by the researcher. As Sapsford (2007) says, it is hard for respondents to refuse an interviewer face-to-face but easy to not complete and post a questionnaire. Thus, the use of multi-level dispatcher/collectors can reduce the shortcomings of postal questionnaires. They can also alleviate possible misunderstandings of the respondents so as to reduce data collection errors to a minimum.
Figure 22: Conceptual Framework for Data Collection in this Survey

Distribution of the multi-level dispatchers/collectors and informants: This diagram shows that dispatchers and informants were widely scattered, though not evenly spread in the territory. Legend:

- 🟢: The 1st level dispatcher
- 🟡: The 2nd level dispatcher
- ⬜: The 3rd level dispatcher
- ⭐: The Informant (In fact, except the Researcher, all other dispatchers were informants.)

(Source: Developed for this research)
3.7.5 Second Data Collection

The objects of the first data collection were general working people so they were employees from various fields of businesses or industries. They were expected to complete the questionnaires by themselves, and their answers or responses to the questions directly reflected their own work attitudes in respect of certain work situations during the economic downturn under the shadow of the GFT. In fact, employees could only express their work attitudes in the survey, but they could not objectively evaluate their own work behaviours. Therefore, the second data collection was designed to evaluate employees’ work behaviours for comparison with their work attitudes survey in the first data collection. The participants in the second data collection were employers, managers and supervisors. Through these people’s observations of their employees’ work attitudes, they were required to evaluate their employees’ work behaviours. These respondents were managers of different businesses or trades. Because of the guanxi mechanism, the researcher got 36 participants to provide their overall employees’ work behavioural data. The numbers of employees under each of these managers ranged from 5 to about 1,000. In this second data collection phase, the contents of the questionnaire were very similar to the first one and had the same structure, but the questions/statements were modified slightly; for example, in the first questionnaire “I accept benefits-cuts if my organisation is declining” became “Employees accept benefits-cut when the organisation is declining” in the second questionnaire.

The purpose of the second data collection was to evaluate employees’ work behaviours in the period of an economic downturn in the time of the GFT. The researcher wanted to see whether the actual findings would meet the assumptions that the environmentally related factors had a relationship with work behaviours, and that this relationship was mediated by related work attitudes. Hence, a second data collection was required.
3.8 Data Processing

3.8.1 Organising and Re-numbering the Questionnaires

Without further assistance from other persons after the data-collection stage, the researcher had to handle as many as 562 returned questionnaires. Therefore, the process had to be very well organised. Chronologically, the returned questionnaires were recorded in a register in which the dispatchers’ names, dispatch dates, and return dates were clearly stated. In addition to the ‘questionnaire distribution register’ another tool was the ‘number-assigning register’, which was used to assign the returned questionnaires with numbers sequentially starting from 001 to the last one, 562. After having assigned the set of numbers as described above, it was that the completed questionnaires and the incomplete ones were all mixed up together. This caused confusion when beginning the sorting of the demographic data.

In order to do the job more effectively, the researcher had to draw out all the incomplete forms from the whole lot and re-number both the complete and incomplete questionnaires in a chronological manner. After the re-numbering process, the samples were re-assigned from 001 to 514 as complete questionnaires, and 515 to 562 as incomplete ones. Completed questionnaires referred to both demographic questions and attitudinal questions were completely answered by the respondents. However, in this survey, incomplete questionnaires only meant that demographic questions were partially answered by the respondents, but the attitudinal questions were fully answered and returned. Hence, these incomplete questionnaires were still usable for work attitudes analysis.

3.8.2 Checking and Coding the Data

Before coding and inputting the data from the questionnaires into a computer, the checking process had to be done. According to Fowler (2009), the most important check is to make sure the data file is complete and in good order and every field should be filled with only one appropriate code. That is, only one answer is possible, therefore only one code is recorded for an answer to the question. However, in the
checking process of this project, it was found that some answers were marked improperly, for example, marking two boxes for one question. Fortunately, the researcher had written down the dates and dispatchers’ initial names on the back of all returned questionnaires, so the relevant respondent could easily be traced, and the responsible dispatcher could recall the respondent for clarification in cases of any doubt. Only the dispatchers who handled the questionnaires knew more about the relevant respondents, since it was not necessary for the researcher to identify those respondents.

(A) Pre-coded Questions
Data concerning respondents’ attitudes towards the attitudinal questions on the questionnaires were measured with a seven-point Likert Scale, and the respondents’ answers were marked in one of the boxes ranging from 1 to 7 for each question, and of course their markings were subject to their own preferences as dispatchers had initially been told not to affect respondents’ decisions. The seven-point Likert Scale allowed the respondents to select one of the seven levels of attitudes toward the questions ranging from extremely negative (strongly disagree/disbelieve) to extremely positive (strongly agree/believe).

Respondents’ demographic data were measured with different number-settings:

Gender Coding: Male = 1, and Female = 2

Job / Organisation Business Nature Coding:
There were numbers from 1 to 22 and each represented a category of businesses. (Categories had already been pre-defined by a coding list in which groupings were made by tallying up all declared business fields mentioned by the respondents.)

Monthly Salary Coding: from 1 to 9
1= below $6,000.  2= $6,000 to $10,000.  3= $10,001 to $15,000
4= $15,001 to $20,000.  5= $20,001 to $25,000.  6= $25,001 to $30,000
7= $30,001 to $40,000.  8= $40,001 to $50,000.  9= $50,001 or above

Age Coding: from 1 to 6
1= 18 to 26 years old   2= 27 to 35 years old   3= 36 to 43 years old
4= 44 to 51 years old   5= 52 to 59 years old   6= 60 or over

Marital Status Coding: Single = 1, and Married = 2

Education Level Coding: from 1 to 6
1= Primary School   2= Secondary School   3= Vocational Training
4= Associate Degree or Diploma   5= Bachelor’s Degree
6= Postgraduate or above

To enhance the computerised SPSS input convenience, the nine sections (I to IX) of the questionnaire were also pre-coded separately as below:

I. Job Satisfaction during an Economic Downturn as [JS] under which there are 13 items from JS-01 to JS-13.
II. Job Involvement during an Economic Downturn as [JI] under which there are 3 items from JI-14 to JI-16.
III. Affective Commitment during an Economic Downturn as [AC] under which there are 2 items from AC-17 to AC-18.
IV. Continuance Commitment during an Economic Downturn as [CC] under which there are also 2 items from CC-19 to CC-20.
V. P-O Value Congruence during an Economic Downturn as [PO] under which there are 4 items from PO-21 to PO-24.
VI. Job Withdrawal Intention during an Economic Downturn as [JW] under which there are three items from JW-25 to JW-27.
VII. Belief about the damages of the Global Financial Tsunami as [BFT]
VIII. Organisational Decline as [ODC]
IX. Organisational Downsizing as [ODS]

(B) Coding and Classification of Variables
From the review of the relevant literature, it was understood that the abovementioned environmentally related factors were independent variables of BFT, ODC, and ODS and were assumed to have significant impacts on the 27 intervening attitudinal variables being items from JS-01 to JW-27 relative to the six dimensions of work behaviour being dependent variables listed above from JS to JW. It was further assumed that the relationships between the environmentally related variables and the
work behavioural variables were mediated by the attitudinal variables. Mediation is supported when the addition of the interaction results in a significant increase or decrease in the variance associated with the dependent variables beyond the variance accounted for by the main effect. More discussion about correlations will come at a later stage.

For demographic variables, younger age range (18-43 years) was coded as 1, and older age range (44-60 or above) was coded as 2, and which two groups are matching the projected younger and older age groups of the hypotheses. This scale is based on usual personnel practice and is adopted by a number of corporations in Hong Kong. In contrast to these two age ranges, the researcher set up six categories of ages in the questionnaire for respondents’ easy choices. These were: 18 to 26, 27 to 35, 36 to 43, 44 to 51, 52 to 59 and 60 or above. Therefore, it was necessary to re-group them into two types (old and young) after all completed questionnaires were received.

With regard to job levels, the researcher expected to define three groups. The upper level was coded as (U), the middle level as (M), and the lower level as (L), and these codes were to be filled in by the researcher when analysing the data. However, the classification was not only based on respondents’ self-reported job titles but also on the nature of their jobs as well. Subsequent justification will also be based on their experiences and professional or skill levels. In order to enable a reasonable estimation, setting up salary ranges on the questionnaire to help measure respondents’ job levels was necessary. For example, the job level of a branch manager of a fast food chain-store is quite different from that of a branch manager of a financial institution. The salary range for the former may be $8,000 to $10,000 in contrast to the latter, which may be as much as $30,000 to $45,000. Thus, with the job title alone, without the guideline of the salary range, one could hardly justify the job levels of the respondents. That is why the final definition was made after all completed questionnaires were collected and personal data analysis completed. Market salary information was available from several bigger HR consulting agencies; for example, the ‘Guide to HK Market Salaries’ is currently provided and modified monthly by Gemini Personnel Limited. The researcher also adopted the ‘Master Pay Scale (MPS)’ of the government pay system for reference (See Appendix IX). The MPS covers mostly salary grades from 0 to 49 points of different levels of the civil servant system. For
statistical purposes, researchers usually re-group such salary grades into three groups. The classifications under this model are as follows:

1. Lower level (L) — (Less than $6,000, $6,000-$10,000, and $10,001-$15,000).
2. Middle level (M) — ($15,001-$20,000, $20,001-$25,000, and $25,001-$30,000).
3. Upper level (U) — ($30,001-$40,000, $40,001-$50,000, and $50,001 or above).

In addition to the above guideline, the employees’ job titles and job type were also used in the final evaluation. If possible, further consultation with certain HR specialist firms for validation of these job level classifications was sought.

Because attitudes are said to be summary evaluations of persons, objects, ideas, or activities along a dimension ranging from positive to negative (Costa and DeMatos, 2003), a scale to rank characteristics of attitudes was appropriate. In general, the coding process was undertaken to assign numbers to the values and levels of all variables of the collected data.

(C) Coding Open-ended Questions

There were two open questions in this questionnaire. One was about what other impacts of the economic downturn were affecting the respondent’s work status, and the other was about the respondent’s opinion regarding this survey.

According to Bryman and Bell (2003), coding an open question usually entails reading and re-reading transcripts of respondents’ replies and formulating distinct themes in their replies. It is very important that the meaning of respondent’s reply is not misinterpreted. A coding frame needs to be designed that identifies the types of answers associated with each question and their respective codes (i.e. a series of numbers). Certain coding rules should also be established for the identification of certain kinds of answers in terms of a theme. However, this research used ‘key words’ for interpreting the meanings of respondents’ replies instead of coding. Further explanation will be made in a later section.
3.8.3 Data Entry

As defined by Zikmund (2000), data entry is a process of transferring data from a research project to computers. Based on the coding of the questionnaire items, the researcher began to set up the SPSS computer software by defining all the variable names, types, and required formats onto the spreadsheet screen. Following the above identity numbers (cases) from 001 to 562, the researcher input the value of each item one by one from each returned questionnaire into the appropriate cells under the specific variable names of each column of the spreadsheet. Afterwards, it was necessary to check the values of each cell on the spreadsheet by comparing respondents’ markings in the answer boxes of each questionnaire to see whether the data was properly inputted. This process was very time-consuming, but the researcher went through all data from the 562 respondents to ensure a high degree of accuracy.

3.8.4 Testing the data

To ensure the fit of the data that had been keyed in, the researcher operated simple statistical tests by running the data through basic SPSS applications to obtain the frequency, mean, minimum, maximum, and percentage analysis, and then generated output sheets for preliminary study.

3.9 Statistical Measurement and Analysis

3.9.1 Scaling Techniques

There are several types of rating scales for statistical measurements, including simple category scales, multiple-choice-single-response scales, multiple-choice-multiple-response scales, Likert scales, semantic differential scales, and numerical scales. (Cooper & Schindler, 2008). The following were used in this research:

(1) Simple Category Scale – two mutually exclusive response choices are offered.

For example, gender is either male or female.
Multiple choice, Single-response Scale – multiple options for the rater are offered, but only one answer is wanted. For example, marital status, age ranges, salary ranges, and education levels.

Likert Scale – the most frequently used variation of the summated rating scale. Statements that express either a favourable or unfavourable attitude toward the object of interest are offered. This is also regarded as attitude scaling, and respondents are requested to express the degree of their agreement or disagreement with an item by placing a mark on some point on the scale which runs from ‘strongly disagree’ to ‘strongly agree’ or ‘strongly disbelieve’ to ‘strongly believe’. Attitudes are complex, and people who hold an overall attitude on an issue may respond one way to one aspect, but very differently to some other aspect of the same issue. Hence, Jankowicz (2000) argues that results will not be reliable if the researcher assesses attitudes on just one scaled item. It is better to cover various aspects of the issue in question by using many different items and deriving some kind of combined score.

According to this logic, the researcher included several statements representing various aspects to describe each dimension of work behaviour in the questionnaire. In the work attitude questionnaire, participants were asked to agree or disagree with each statement on a seven-point scale. Each response was reflected by a given numerical score to express the degree of attitudinal favourableness or unfavourableness, and the scores were summed to measure the respondent’s overall work attitudes.

The data collected from respondents included individual demographics, including age, gender, marital status, years of service, job title, and education can be measured by either (1) Simple Category Scale or (2) Multiple choices in a Single-response Scale. With reference to the work of Jackson and Associates (1992), it is evident that the study of demographic diversity has received increasing attention in the management literature. Therefore, certain issues regarding demographic differences among employees work attitudes will also be considered in this study.

(A) Special Scale for Measuring Work Attitudes

In addition to the demographic data measured by the simple category scale and multiple-choice-single-response scale, the attitudinal data was measured by a special
Likert scale in this study. That is, for measuring all negative (unfavourable) and positive (favourable) work attitude variables/items in this project, the researcher used a modified seven-point Likert scale with a range of -3, -2, -1, 0, +1, +2, +3, which is different from that of the scale (from 1 to 7) on the existing questionnaire. The purpose of the special scale is to accommodate the negative/positive nature of ‘Attitudes Study’. Additionally, an instrument with two symmetrical oppositely-connected triangles (see Figure 23 p127) is used to display a better visual representation for measuring and displaying the degree of negativity or positivity of employees’ work attitudes. When using a computer for statistical analysis, the expression of the above special range was changed back to being from 1 to 7. In other words, the range of -3, -2, -1, 0, +1, +2, +3 returns to 1, 2, 3, 4, 5, 6, 7. For example, 1 to 3 = negative, 4=neither negative nor positive, and 5 to 7=positive. But on the special scale, the expression of -3, -2, -1, becomes ‘disagree’ or ‘disbelieve’, and +1, +2, +3 becomes ‘agree’ or ‘believe’; but 0 means ‘no idea’ or ‘neither disagree nor agree’ or ‘neither disbelieve nor believe’. Of course, the expression of -3 means ‘strongly disagree’ or ‘strongly disbelieve’, and +3 is ‘strongly agree’ or ‘strongly believe’. The outcomes generated from either scale will be the same.

(B) Special Diagram for Visual Representation
Having referred and modified the structure of Peterson’s *Constructing Effective Questionnaires* (2000), the researcher developed the above scale range of -3, -2, -1, 0, +1, +2, +3 for measuring the degree of negative and positive attitudes of employees reflected by the specially-designed diagram.

The ‘Attitude Measuring Instrument’ depicted in Figure 23 visually illustrates the measurement of employees’ work attitudes. It can be seen that the red line expresses the widest degree of positive attitude; the brown line depicts the medium degree, and the orange line shows the narrowest degree. In contrast, we can visually sense that the blue, light blue, and green lines show respective degrees of employees’ negative work attitudes in the same manner.

Minus 3 represents the highest degree of negative attitudes, and +3 represents the highest degree of positive attitudes, but 0 represents (neutral) neither negative nor positive attitudes. When asking for the work opinions of the respondents on the
questionnaire, the researcher originally intended to define -3 as strongly disagree or strongly disbelieve, +3 as strongly agree or strongly believe, and 0 as ‘no idea/neither disagree nor agree / neither disbelieve nor believe’ with this special ‘Attitude Scaling’.

Figure 23: Tailor-made Instrument for Measuring Work Attitudes

(Source: Developed for this research)

The violet colored scale in Figure 24 below has been modified from the Likert Scale, which is supposed to be from 1 to 7 in this case. However, in order to clearly interpret and display the degree of negativity or positivity of employee work attitudes, the researcher has tailor-made these two diagrams for better visual expression and exhibition. The above diagrams are used in the conclusion chapter to give readers a visual conception regarding the findings, that is, to visually display the general employees’ positive or negative degree of work attitudes towards the six dimensions of their work behaviours in the time of the GFT in Hong Kong.
Figure 24: Modified Likert Scale

(Source: Developed for this research)
Figure 25: GFT Attitudes Model Measuring Instrument

Belief about Damages of the Global Financial Tsunami -> Organisational Decline in GFT -> Organisational Downsizing in GFT

Employee Work Attitudes reflected by encountering 27 items of relative work attitude objects (situations)

(1) Job Satisfaction Behaviour
(2) Job Involvement Behaviour
(3) Affective Commitment Behaviour
(4) Continuance Commitment Behaviour
(5) P-O Value Congruence Behaviour
(6) Job Withdrawal Intention Behaviour

Through the Testing Process

Results of Work Attitudes toward Work Behaviors

Remarks: The upper triangular-shapes stand for three levels of positive work attitudes. In contrast, the lower triangular-shapes stand for three levels of negative work attitudes. The intersection point stands for neither negative nor positive work attitudes. The research results will show how negative or positive of employees’ work attitudes are (when encountering the related attitude objects) toward each of the six dimensions of work behaviour.

(Source: Developed for this research)

(C) Examples of Visual Representation of the Outcomes
Figure 25 above represents examples of employees’ work attitudes toward the six dimensions of work behaviour.

There are six figures representing the possible outcomes of ‘job satisfaction’, ‘job involvement’, ‘affective commitment’, ‘continuance commitment’, ‘P-O value congruence’, and ‘job withdrawal intention’.

Figures show various degrees of positive / negative work attitudes as below:
(1) If employees’ work attitude toward ‘job satisfaction’ is extremely negative,
(2) If employees’ work attitude toward ‘job involvement’ is extremely positive,
(3) If employees’ work attitude toward ‘affective commitment’ is quite positive,
(4) If employees’ work attitude toward ‘continuance commitment’ is quite positive,
(5) If employees’ work attitude toward ‘P-O value congruence’ is slightly positive,
(6) If employees’ work attitude toward ‘job withdrawal intention’ is extremely negative,
then, the results would be shown as illustrated in Figure 26 as follows:

Figure 26: Degrees of Positive/Negative Work Attitudes

![Figure 26: Degrees of Positive/Negative Work Attitudes]

3.9.2 Typical Analytical Techniques

*Analyses Starting with Collected Data and Ingredients of the Questionnaire*

In the analysis, it was firstly necessary to find out appropriate linkages between the 27 work attitude items/objects and the six dimensions of work behaviour, and then to connect them with the environmentally related factors of the ‘global financial
tsunami’, and finally to relate them to the five hypotheses. For analysing such a large number of variables in this process, the following techniques are helpful.

3.9.2.1 Factor Analysis

According to Ticehurst and Veal (2000), factor analysis is a technique for use when the number of variables is large and there is a desire to group them in some way. In many cases, each of the work behaviour variables (job satisfaction, organisational commitment, involvement, etc.) is often measured by using a large number of work attitude items. Hence, factor analysis is applied to reduce or extract the data into a smaller number of factors, by explaining them in terms of their underlying common dimensions. In this study, for example, the dimension of ‘job satisfaction’ (JS) behaviour is measured by as many as 13 work items (intervening variables). For applying the factor analysis, only a few of the higher scores among such 13 intervening/work attitude variables, were used to represent the whole group of JS.

3.9.2.2 Correlation Coefficient (r)

Correlation coefficients can be used to observe the relationships between two or more ordinal or ratio variables (Ticehurst & Veal 2000). Accordingly, if two phenomena are related in a systematic way, they are said to be correlated and can be described as:
- positively correlated if one variable increases as does the other;
- negatively correlated if one variable increases as the other decreases; or
- uncorrelated when there is no relationship between the variables.

Correlation coefficients are usually represented by the letter $r$. The closer the coefficient is to 1.0, the greater the correlation. For example, 0.9 is a high positive correlation, 0.2 is a low positive correlation, and -0.8 is a high negative correlation. In other words, the correlation could range between -1.0 and +1.0. Any correlation between two variables is said to be significant when there is a high probability of such relationship. With reference to Sekaran
(1984), a significance of \( p=0.05 \) is generally regarded as an acceptable level in social research. This figure indicates a 95 percent chance that there is a true correlation between two variables, and only a 5 per cent chance that the relationship does not exist. Of course, if \( p=0.01 \), a true or significant correlation exists between the two 99 times out of 100. The above confidence level is measured by using a significant two-tailed test in the analysis. The significance of a correlation coefficient (r) also depends on its magnitude (closeness to 1) and the sample size and is assessed by means of a t-test (Ticehurst & Veal 2000).

3.9.2.3 Multiple Regressions

Regression analysis can be said to be an extension of bivariate correlation. Multiple regression is linear regression that involves the examination of relationships between two or more independent variables to determine how much of the variance in the dependent or criterion variable is explained by each independent variable. In linear regression, the procedure fits a straight line to the data, conceived as the line of best fit. In multiple regressions, the procedure fits a surface to the data, conceived as the surface of best fit so that three dimensions may be generated (Ticehurst & Veal 2000). As described by Sekaran (1984), it should be noted that the independent variables or predictor variables may often be correlated to the dependent variable to varying degrees, and that they might also be inter-correlated among themselves. For example, among the three independent variables in this research, ‘organisational downsizing’ is likely to be related to ‘organisational decline’ and these two are also likely to be influenced by ‘belief about the damage due to the GFT’. In turn, all these independent variables are jointly regressed against the dependent variables – employees’ work attitudes. This process is therefore known as multiple regression analysis.

In this project, Hypothesis 1 was tested by applying multiple regression analysis to see whether the three environmentally related factors (‘Belief about the damage due to the GFT’, ‘Organisational decline’, and ‘Organisational
downsizing’) are determinants that influenced people’s work attitudes in the time of the GFT.

Therefore, the regression equation is expressed as below:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon \]

Where:
- \( Y \) = Dependent Variable (Employees’ Work Attitudes)
- \( X_1 \) = Independent Variable #1 (Belief about the damages of the GFT)
- \( X_2 \) = Independent Variable #2 (Organisational Decline)
- \( X_3 \) = Independent Variable #3 (Organisational Downsizing)
- \( \beta_1, \beta_2, \beta_3 \) = Regression coefficient for each independent variable
- \( \varepsilon \) = Random error

**Adopting the appropriate Analytical Methods and Hypothesis Tests**

Certain descriptive statistical methods, like the studies of frequencies, measures of central tendency and dispersion in locating the mean, were conducted before the hypotheses testing. But, with reference to the approach taken by Sakunasingha (2006), the major inferential statistical tools that the researcher had to apply in testing the five projected hypotheses include Factor Analysis, Pearson’s Correlation Analysis, Partial Correlation Coefficients, and Multiple Regression Analysis.

In order to test Hypothesis 1, it was necessary to know how much of the variances in the dependent variables (employees’ work attitudes) were explained by the independent variables (in this case, environmentally related variables or organisational variables). Therefore, the researcher adopted multiple regression analysis, which, as Hair et al. (1998) point out, is the most widely used statistical technique in general and specific business scenarios, in solving organisational problems and in business forecasting. By using this technique, the researcher explored employees’ work attitudes, to infer their work behaviours to formulate social and organisational HR strategies.

A Pearson correlation matrix was applied to test Hypotheses 2, 4 and 5. The correlation is derived by assessing the variations in one variable as another variable also varies. Sekaran (1984) explains that a significance of \( p=0.05 \) is regarded as the generally accepted minimum level in social science research.
When testing Hypothesis 3 to see whether the relationship between the independent variables and the dependent variables is mediated by the intervening variables, the researcher used the mediator equation, which is reflected in a partial correlation analysis. Baron and Kenny (1986) define a mediator as a qualitative or quantitative variable affecting the strength of the relationship between an independent or predictor variable on one hand, and a dependent or criterion variable on the other. They point out that mediators and predictors are at the same level with respect to their role as causal variables that are antecedent or exogenous to certain effects. They go on to say that mediating variables always work in the same way as independent variables. Therefore, the 27 mediating (intervening) variables in this model were assumed to have a function somewhat like the independent variables. According to Hair et al. (1998), the relationship between an independent and a dependent variable, when it is affected by another independent variable (or intervening variable), is called a mediating effect. This situation occurs when the intervening variable, a second independent variable, changes the form of the relationship between the first independent variable and the dependent variable. It is also known as an interactive effect and is similar to the interaction effect seen in the analysis of variance and multivariate analysis of variance. Hence, the mediator effect is reflected in the partial correlation analysis for testing Hypothesis 3 in this model. To determine whether the mediating effect is significant, we first estimate the original (un-mediated) equation and then estimate the mediated relationship. If the change in R square is statistically significant, a significant mediating effect is present. Thus, only the incremental effect is assessed, not the individual variables. Further discussions about testing the five hypotheses (two of which are divided into three sub-hypotheses) will be found in the next chapter.

Moreover, in order to meet the requirements of two sets of samples (n=562 from the first data collection and n=36 from the second data collection), the application of an ANOVA paired samples t-test was used to examine the relevance or equality of the sets of samples. That is, to determine whether two groups’ attitudes are viewed similarly or differently, a t-statistic was calculated. The t-statistic is the ratio of the difference between two groups, their sample means (µ1–µ2) to the standard error. The standard error is an estimate of the difference between means to be expected because
of sampling error, rather than the real differences between means. This can be expressed in the equation: 
\[ t \text{ statistic} = \frac{\mu_1 - \mu_2}{SE_{\mu_1 \mu_2}} \]

According to Sekaran (1984), on many occasions, it is important to know whether two groups are different from each other on a particular interval-scaled or ratio-scaled variable of interest. For example, the ANOVA Paired-samples t-test comparing two groups’ work attitudes toward certain work behaviours met these criteria, so a t-test was appropriate. It was possible to go further than knowing the means and standard deviations of the dependent and independent variables from the t-test and ANOVA. It was also possible to see the characteristics of the bivariate or multivariate relationships of the variables in this study as regards their nature, structure, directions, and significance.

Besides the testing of the five hypotheses (there are also three sub-hypotheses for H1 and H3), some additional information about the attitudinal responses of the general employees as to their work behaviours during the global financial tsunami stood to be revealed. Hence, comparisons between two sets of samples (n=562 vs. n=36) were done. With reference to the models of Lankau and Scandura (1996) and Lefkowitz (1994) about differences in work attitudes between two groups, the statistical analysis in this sphere was assessed with analysis of variance (ANOVA). Therefore, some of the abovementioned situations were further tested by means of ANOVA. Lefkowitz (1994) indicated that results were highly dependent on the nature of the covariates in the analysis. Thus, employees’ work attitudes were assessed with a broad sphere of psychological reactions to the job and to the organisations as a whole.

### 3.10 Error in Survey Research

Bryman and Bell (2003) categorise errors in survey research into the following four categories:

1. Sampling error is present if a sample that is not likely to truly represent the population when probability sampling is employed only to a segment of the whole population. For example, a study of employees of the transportation field cannot only be based on a sample from the bus-drivers’ union.
(2) Sampling-related error is also known as non-sampling error. It arises from activities or events that are related to the sampling process connected with the issue of generalisability or external validity of findings. It is usually caused by an inaccurate sampling frame or a high non-response rate.

(3) Data collection error involves: poor question wording in self-completion questionnaires or structured interviews; poor interviewing techniques; or flaws in the administration of research instruments.

(4) Data processing errors are mostly due to faulty management of data, that is, errors in the answer-coding process.

Quantitative studies always include a number of additional personnel in the operation of the project. Besides the researcher, there may be some other persons like interviewers and project assistants. Moreover, the large amount of data from the informants or respondents has to be handled with great care. Any small mistake at any stage of the process will result in an error. In many circumstances, errors cannot be avoided when things are beyond the control of the researcher or are unnoticeable. However, it is the responsibility of the researcher to enhance the research in good order by being careful to avoid errors even though a guarantee cannot be made. Therefore, in this project, the researcher made every effort to minimise the possibility of errors.

To avoid the above four types of errors, the following efforts were made:

(1) Minimising the sampling error

No matter what sampling methods, probability or non-probability, sampling error may still arise if negligence existed in any step of the process. To minimise the possibility of this error, the researcher expanded the sample size from the initially planned $n=150$ to $n=600$. With a bigger sample, a wider scope of employees from various businesses and industries could be covered to provide an even higher degree of representation of the whole population. The sample comprised 562 general employees from various fields of business, which were comparable to the official classifications of the Census and Statistics Department of Hong Kong. So, they are capable of representing the population under study.
(2) Minimising sampling-related error
Sampling-related error is derived from an inaccurate sampling frame or non-response. In the absence of a sampling frame, this research relies on a new method of data collection namely “mail survey assisted by multi-level dispatchers /collectors approach”. With the strong impact of guanxi, this approach proved to be very effective since an extremely high response rate was achieved. The basic relationship and connection between the dispatchers and the respondents can eliminate misunderstandings about the questions in the survey. In case of any doubt, the respondent can ask the dispatcher for clarification as every dispatcher already had the experience of completing the questionnaire correctly and had returned the same to the researcher before dispatching further questionnaires to his or her informants. If the dispatcher could not answer a particular question raised by the respondent, the dispatcher could call the researcher for a correct interpretation. Because the collection and follow-up tasks were conducted by the multi-level dispatchers, higher response rates from the informants were attained. Therefore, this kind of sampling related-error was avoided.

(3) Minimising data collection errors
In order to minimise data collection error, improving the contents and wording of the questionnaire is needed. The questionnaire development in this research was based on the ideas of Elizur’s 24-item instrument used to measure the work values of surviving and non-surviving managers during an economic recession in 1997 and 1998. Additionally, Lankau and Scandura’s (1996) six work behaviour dimensions were included. Because their instruments had been tested and proved to be valid in various researches, the adoption of their ideas in this research validated the questionnaire and minimised data collection errors. Moreover, Dr. Raymond Cheng’s final review of the questionnaire further reduced the possibility of this type of error before the data collection process took place.

(4) Minimising data processing errors
During the coding of respondents’ answers, particular care was taken by the researcher who repeatedly checked procedures. Good data management has also been applied to minimise data processing errors.
3.11 Reliability and Validity

Reliability and validity are the two most important prerequisites of good research. All measurements in the research mainly deal with the collected samples. If the samples are consistent, accurate, and representative of the subject of interest, accurate inferences based on these measurements can be made (Landy & Conte, 2007). The term ‘reliability’ in a study means the measurements are reliable and people can feel confident about the results. This means that, if the researcher did the research again at different times, or if someone else took the measurements, the values would remain the same. In other words, reliability is the stability of the measure. That is, stability is the extent to which repeated measurements yield constant results or supposedly identical measuring instruments yield identical results (Sapsford 2007). To measure reliability, researchers usually apply Cronbach’s alpha test in which the closer the reliability coefficient gets to 1.0, the better. Generally, reliabilities less than .60 are considered to be poor; those in the .70 range, acceptable; and those over .80, good.

‘Validity’ concerns about whether the researcher had consistent information on which to base conclusions. Validity addresses the issue of whether the measurements the researcher takes accurately and completely represent what he or she had hoped to measure (Landy & Conte, 2007). There are three aspects of validity: (1) validity of measurement – the extent to which the data constitute accurate measurements of what is supposed to be being measured; (2) population validity – the extent to which the sample gives an accurate representation of the population which it is supposed to represent; and (3) validity of design – the extent to which the comparisons being made are appropriate for establishing the arguments which rest on them (Sapsford 2007).

The Degree of Consistency

This study covers both descriptive statistics and inferential statistics. For maintaining reliability standards emphasising the degree of consistency, the coefficient alpha is expected to exceed 0.80 which is widely regarded as an acceptable level.
3.12 Ethical Considerations

In order to fulfil ethical obligations in human research, researchers are obliged to take care of their informants and participants. As explained by Bryman and Bell (2003), they must consider:
– whether there is harm to participants;
– whether there is a lack of informed consent;
– whether there is an invasion of privacy;
-- whether there is any deception.

No matter what type of research is carried out, the universal principle of ethical consideration always emphasises that there are no harmful effects on human beings. For academic research, it is necessary that no damage should come to the respondents as a result of their participation in the research.

The central idea of informed consent means that the researcher is responsible for providing sufficient information so that prospective participants are able to make an informed decision about whether they wish to participate in the study or not. The researcher’s true identity should also be known to the participants. The respondents’ right of privacy and their right to know the research outcomes should also be respected. In addition, the researcher should allow the withdrawal of the respondents from the middle of the process if so requested by them. Consent from the participants should be obtained in advance, especially for very personal matters. Finally, deception should never occur in academic research. In other words, if the research purposes mentioned in their introductory statement on the questionnaire or in the invitation letter are totally different from what actually they are proceeding, this will constitute a deception.

In this research, a cover letter attached to the questionnaire explicitly stated the purpose of the survey and guaranteed the confidentiality of the data to be collected from the respondents. Further explanation that the data was to be handled with strictest care and would be destroyed after completion of the project was emphasised. Anonymity was allowed so that the names of respondents were optional on the
questionnaires. Identifying respondents by a code number rather than by name may be reassuring to some extent. In the case of mailed survey questionnaires, anonymity may enhance the response rate. Moreover, the following explicit statement was prominently displayed on the front page of the questionnaire: “The contents of this form are absolutely CONFIDENTIAL. Information identifying the respondent will not be disclosed under any circumstances”. It is understandable that some employees are very concerned about the possibility of their negative feelings or resentful opinions being revealed to their employers, in turn with the fear of jeopardising their job status. Therefore, ethical reminders to the research assistants about such worries were followed by a formal training session.

Additional ethical considerations are about intellectual property and copyright. The works from other scholars were well protected and respected. Their concepts and ideas applied in this research are properly cited. Plagiarism was absolutely avoided in this research. In order not to mislead readers when searching for secondary information to support certain constructs of this paper, the researcher made every effort to ensure the truth and correctness of the source by cross-checking.

3.13 Summary of the Chapter

In this chapter, an introduction of the research methodology was presented. Several research and sampling designs as well as questionnaire formation and various methods for data collection were discussed. After a pilot test and comparisons of a number of approaches, the most appropriate design and methods were selected. In particular, a new approach – the “Mail-survey assisted by multi-level dispatchers/collectors” proved to be an effective method for data collection with five advantages over the traditional mail-survey method. Tailor-made scaling techniques, together with a description of statistical measurements and analysis were introduced. Certain issues regarding reliability and validity as well as ethical consideration have also been clearly discussed.
CHAPTER 4
DATA ANALYSIS, RESULTS AND FINDINGS

4.1 Introduction

The present chapter transforms the data collected from the mail survey that was assisted by the ‘multi-level dispatchers /collectors approach’ into a set of tests regarding the hypotheses. In this data analysis chapter, a typical methodology is applied. According to the advice of Cooper and Schindler (2008), the data has been rendered manageable by reduction, thereby enabling a summarising process, the identification of patterns, and the application of statistical tools. The findings were then interpreted with reference to the research questions to discover whether the results were consistent with the hypotheses and theoretical approach.

4.1.1 Chapter Objective and Chapter Structure

In this chapter, the structure is composed of eight sections. The sections follow the basic trajectory of the data analysis process described by Sekaran (1984) as involving understanding the data, determining its amenability for factor analysis, and testing hypotheses. Section 4.1 begins with the introduction; Section 4.2 outlines a situational analysis; Section 4.3 covers the information about the profile and characteristics of the samples; Section 4.4 conducts the descriptive statistical analysis; Section 4.5 focuses on the analysis of the independent variables, the intervening variables and the dependent variables; Section 4.6 presents a comparison between two sets of work attitude samples while Section 4.7 manages the hypotheses testing and findings; and lastly Section 4.8 concludes with a summary of this chapter. The structure of Chapter 4 is visually represented as follows:
Figure 27: Structure of Chapter 4

4.1 Introduction
   4.1.1 Chapter objectives and structure
   4.1.2 Looking for results

4.2 Situational Analysis

4.3 Profile of sample

4.4 Descriptive statistics

4.5 Analysis of the research variables
   4.5.1 Data Analysis—the identification of the key variables
   4.5.2 Process of data reduction (selection of surrogate variables)
   4.5.3 Relationships between independent and intervening variables
   4.5.4 Relationships between intervening and dependent variables
   4.5.5 Relationships between independent and dependent variables

4.6 Comparison of employees’ work behaviors in Sample 1 (n=562) and Sample 2 (n=36)

4.7 Testing the hypotheses
   4.7.1 Testing H1 with Multiple regression analysis
   4.7.2 Testing H2 with Pearson’s correlation matrix
   4.7.3 Testing H3 with Partial correlation analysis
   4.7.4 Testing H4 with Correlation analysis
   4.7.5 Testing H5 with Correlation analysis

4.8 Summary of the chapter
4.1.2 Looking for Results

The design of this model is based on the major theories of ‘attitudes’, which have been discussed in the literature review chapter. However, *the results* were derived from analysing data collected through the questionnaire under the conceptual framework in relation to the theories of ‘work attitudes’.

With the logical reasoning of the researcher, the attitude objects in this construct function like mirrors to reflect the negative or positive views of employees toward them, and which at the same time are used to measure the actual work attitudes of the employees under study. For measuring the degree of negativity or positivity of employees’ work attitudes, a tailor-made measuring instrument has already been introduced previously, and the following Figure 28 shows the concept of how work attitudes are reflected. This will also relate to further studies of data analysis, together with results and findings.
4.2 Situational Analysis

As mentioned before, this research explores employees’ work attitudes in the particular economic and business environments under the shadow of the GFT. In this model, the phenomena of organisational decline and organisational downsizing occurred during the prevailing economic recession in the time of the GFT, together with the factor of belief about the damage due to the GFT. All such three factors would play a role as determinants of employees’ work attitudes and in turn influence their related work behaviours, and these assumptions will be tested in a later section.
Among the six types of work attitudes, *job satisfaction attitude* is widely recognised by many theorists as a determinant that can influence the behaviour of *job withdrawal intention*. It would seem to follow that there is a negative relationship between intention to leave and job satisfaction (Prottas 2008). However, in an economic recession, *job satisfaction attitude* may no longer be a good determinant of *job withdrawal intention behaviour*. In a seminar held by the Workplace Consultation Promotion Division of the Labour Department, the researcher learned from other participants’ practical personnel management experiences that in many occasions during past economic recessions people would rather work harder, with longer hours with less job satisfaction than to think about job withdrawal. Hence, this is a particularly distinct phenomenon that the researcher wanted to explore during the prevailing GFT in Hong Kong. Meanwhile, the research also investigated whether certain variables may really reflect different outcomes under different environmental and organisational situations. Alternatively, a specific environmentally related factor may be a determinant of attitudes; for example, in this case, the factor of ‘belief about the damage due to the GFT’ explicitly has an influence on employees’ work attitudes toward work behaviours. Therefore, this research analysis examines the interrelationships among the environmental factors, employees’ work attitudes and their related work behaviours as well.

It is apparent that organisations, private or public, could not escape from the adverse effects of the GFT. Of course, not all organisations cut manpower, but many cases of organisational decline and downsizing resulted from fundamental and structural changes during the slowdown of the local economic conditions under the influence of the GFT. No matter whether employees were in a declining, downsizing business or not, they may have had beliefs about the damage derived from the GFT and fears about their job security. According to statistics, the Hong Kong economy suffered from a big downturn as the GDP dropped sharply by 7.8 percent in the first quarter of 2009, which represented the worst situation in 10 years, while the unemployment rate reached 5.3 percent showing the highest point in three years (Headline Daily May 16 & 20, 2009). Certain negative effects resulting from the adverse economic conditions had already emerged as many people had been asking for help on account of monetary and psychological frustrations, anxiety and worries. For instance, a social counselling body *ChiYerYuen Depressed-Mood Counselling Hotline on Financial Crisis* received
more than 3,100 calls for assistance from October 2008 to April 2009 (Headline Daily May 16, 2009). After the analysis in this chapter, this research will give readers some answers about whether the workforce in Hong Kong shared negative feelings.

Of course, the above situational analysis addresses the relevant work-attitude theories integrated with the prevailing economic and business situations in Hong Kong, and it also leads to the statistical analysis of three carefully selected environmental and organisational factors and several work variables closely related to the GFT. But other causal factors; such as ‘ethics’, ‘norms’, ‘judgments’, ‘stimulus’, ‘personality’, ‘knowledge’ and ‘information’, have been excluded from investigation since they are beyond the capacity of this research project.

4.3 Profile of Sample

In the data collection process, a survey questionnaire with a cover letter was sent to each informant by mail or by hand through the ‘multi-level dispatchers / collectors’. Due to the guanxi existing between the dispatchers and the respondents, the responses were very satisfactory. There were 800 copies of the questionnaire dispatched, and 515 fully complete forms were returned, and 47 other forms were returned but missed one or two demographical answers. Besides such missing demographic items, fortunately these 47 respondents answered all the attitude questions, thereby making their questionnaires still valid for attitude-analysis purpose. Generally, all of the 562 returned questionnaires were regarded as valid cases, which resulted in a high response rate of 70.25 percent. The other returned forms with only a few answers marked on them. These were not counted in the process so they were not being used for any kind of analysis in this survey.

4.3.1 Analysis Beginning with Data-check for Accuracy

In order to get a better feel for the data and to check for other types of errors or problems in the questionnaires, the researcher began by running the SPSS 16.0 program called ‘Descriptives’. By computing the basic descriptive statistics for all the subjects (variables), it was possible to check their accuracy by verifying that there
were no out-of-range values. One item was found to have been erroneously input, and this was rectified during the data checking process. Through the descriptive and frequency analyses, it was possible to check the accuracy of data files, ensuring all related measures such as the minimum, the maximum, the mean, and the standard deviations were in good order. All attitudinal items were found to be properly marked and inputted. On the returned questionnaires, only a few demographic answers were unmarked, and these missing items did not affect the overall attitudinal analysis.

4.3.2 Characteristics of the Sample

The profile of the respondents (n=562) is shown in Table 8. It displays the relevant statistical data in six aspects classified by gender, years of service, monthly salary, age group, marital status, and education.

(1) Gender – Of the 562 respondents, there were 263 males and 276 females but 23 were not declared. That is, male respondents account for 47% of the total samples, females for 49%, and 4% were undeclared.

(2) Years of service – There were 516 respondents who reported their years of service with their organisations, but 46 persons did not report. About 33.7% had worked with their organisations for several months to five years; approximately 18.8% of the respondents had worked with their organisations for six to ten years; around 2.5% had worked with their organisations for eleven to fifteen years; and about 12.3% had worked with their organisations for at least sixteen years up to twenty years. The remaining groups accounted for 4.6%, 5.7%, 2%, 1.8% and 0.4% of the total respondents respectively and their lengths of service ranged from 24 years to 47 years. The two respondents with the longest years of service had worked for 45 years and 47 years.

(3) Monthly salary – Among the 562 respondents, 546 reported their monthly salary and 16 failed to do so. There were 108 respondents within the salary range of $6,000 to $10,000, accounting for 19.2% of the total; and 113 persons were within the range of $10,001 to $15,000, accounting for 20.1%; and these two groups were the biggest samples. However, there were only 37 respondents falling into the lowest range of salary of less than $6,000 per
month, and 37 respondents were in the highest range of salary of over $50,000 per month, and both extremes accounted for only 6.6% of the 546 respondents.

(4) Age group – The age ranges from 27 to 35 years of age contained 139 persons, between 36 and 43 contained 115 persons, between 44 and 51 contained 106 persons, and between 52 and 59 contained 94 persons, and these comprised the four bigger age groups. They represented 24.7%, 20.5%, 18.9%, and 16.7% of the 550 respondents respectively. The remaining 12 respondents (2.1%) did not declare to which age group they belonged. The youngest group comprised 66 persons from 18 to 26, and the oldest group is comprised 30 persons of 60 or above, and they were the two smallest groups representing only 11.7% and 5.3% of the total respondents respectively.

(5) Marital status – There were 547 respondents who declared their marital status and only 15 (2.67%) did not. Of the 547, 340 (60.5%) were married and 207 (36.8%) were single.

(6) Education – Among the 562 respondents, 551 reported their education and 11 did not (98% versus 2%). There were 37 persons, representing 6.6%, who reported only having received a primary education. The biggest group, with 236 persons, reported secondary school as their highest education, and they accounted for 42% of the total. There were 27 persons (4.8%) who had received vocational training, 73 persons (13%) had received an associate degree or diploma, and 107 persons (19%) possessed bachelor degrees, while 71 persons, representing 12.6%, possessed postgraduate degrees.

Table 8: Profile of Survey Sample

<table>
<thead>
<tr>
<th>Demographic characteristics</th>
<th>Samples (frequencies)</th>
<th>Survey percent</th>
<th>Validity percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Gender: Male</td>
<td>263</td>
<td>46.8</td>
<td>48.8</td>
</tr>
<tr>
<td>Female</td>
<td>276</td>
<td>49.1</td>
<td>51.2</td>
</tr>
<tr>
<td>Total</td>
<td>539</td>
<td>95.9</td>
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<td>23</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>562</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(2) Years of Service:
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<tr>
<th></th>
<th>1 - 5 years</th>
<th>6 - 10</th>
<th>11 - 15</th>
<th>16 - 20</th>
<th>21 - 25</th>
<th>26 - 30</th>
<th>31 - 35 years</th>
<th>36 - 40 years</th>
<th>Over 40 years</th>
<th>Total</th>
<th>Missing (Undeclared)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>191</td>
<td>105</td>
<td>70</td>
<td>69</td>
<td>26</td>
<td>32</td>
<td>11</td>
<td>10</td>
<td>2</td>
<td>516</td>
<td>46</td>
</tr>
<tr>
<td>Percentage</td>
<td>33.7%</td>
<td>18.8%</td>
<td>12.5%</td>
<td>12.3%</td>
<td>4.6%</td>
<td>5.7%</td>
<td>2.0%</td>
<td>1.8%</td>
<td>0.4%</td>
<td>91.8%</td>
<td>8.2%</td>
</tr>
<tr>
<td>Missing (Undeclared)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>11.7%</td>
<td>24.7%</td>
<td>20.5%</td>
<td>19.3%</td>
<td>17.1%</td>
</tr>
<tr>
<td>(3) Monthly Salary HK$:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>18.9%</td>
<td>16.7%</td>
<td>5.3%</td>
<td>5.5%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Less than $6,000</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11.7%</td>
<td>24.7%</td>
<td>20.5%</td>
<td>19.3%</td>
<td>17.1%</td>
</tr>
<tr>
<td>$6,000 to $10,000</td>
<td>37</td>
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<td></td>
<td></td>
<td>6.6%</td>
<td>14.9%</td>
<td>8.5%</td>
<td>8.8%</td>
<td>6.6%</td>
</tr>
<tr>
<td>$10,001 - $15,000</td>
<td>108</td>
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<td></td>
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<td></td>
<td>19.2%</td>
<td>20.1%</td>
<td>5.5%</td>
<td>5.7%</td>
<td>4.3%</td>
</tr>
<tr>
<td>$15,001 - $20,000</td>
<td>113</td>
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<td></td>
<td></td>
<td></td>
<td>20.1%</td>
<td>14.9%</td>
<td>8.5%</td>
<td>8.8%</td>
<td>4.3%</td>
</tr>
<tr>
<td>$20,001 - $25,000</td>
<td>84</td>
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<td></td>
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<td></td>
<td></td>
<td>14.9%</td>
<td>11.4%</td>
<td>5.5%</td>
<td>5.7%</td>
<td>4.3%</td>
</tr>
<tr>
<td>$25,001 - $30,000</td>
<td>64</td>
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<td></td>
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<td></td>
<td>11.4%</td>
<td>11.7%</td>
<td>5.5%</td>
<td>5.7%</td>
<td>4.3%</td>
</tr>
<tr>
<td>$30,001 - $40,000</td>
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<td></td>
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<td>8.5%</td>
<td>8.8%</td>
<td>5.5%</td>
<td>5.7%</td>
<td>4.3%</td>
</tr>
<tr>
<td>$40,001 - $50,000</td>
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<td></td>
<td></td>
<td>5.5%</td>
<td>8.8%</td>
<td>5.5%</td>
<td>5.7%</td>
<td>4.3%</td>
</tr>
<tr>
<td>$50,001 or more</td>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.3%</td>
<td>8.8%</td>
<td>5.5%</td>
<td>5.7%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>6.6%</td>
<td>14.9%</td>
<td>8.5%</td>
<td>8.8%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Missing (Undeclared)</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>97.2%</td>
<td>16.7%</td>
<td>5.3%</td>
<td>5.5%</td>
<td>2.1%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>562</td>
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<td></td>
<td></td>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
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<tr>
<td>(4) Age Group:</td>
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<td></td>
<td></td>
<td></td>
<td>11.7%</td>
<td>24.7%</td>
<td>20.5%</td>
<td>19.3%</td>
<td>17.1%</td>
</tr>
<tr>
<td>18 to 26</td>
<td>66</td>
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<td></td>
<td></td>
<td></td>
<td>11.7%</td>
<td>24.7%</td>
<td>20.5%</td>
<td>19.3%</td>
<td>17.1%</td>
</tr>
<tr>
<td>27 to 35</td>
<td>139</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24.7%</td>
<td>20.5%</td>
<td>18.9%</td>
<td>19.3%</td>
<td>17.1%</td>
</tr>
<tr>
<td>36 to 43</td>
<td>115</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td>20.5%</td>
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<tr>
<td>44 to 51</td>
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<td>18.9%</td>
<td>20.5%</td>
<td>18.9%</td>
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<tr>
<td>52 to 59</td>
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<td>18.9%</td>
<td>18.9%</td>
<td>19.3%</td>
<td>17.1%</td>
</tr>
<tr>
<td>60 or Above</td>
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<td></td>
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<td>16.7%</td>
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<td>100.0%</td>
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<td>98.0%</td>
<td>98.0%</td>
<td>98.0%</td>
<td>98.0%</td>
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</tbody>
</table>
The units of the sample are employees of different classes from various fields of business and industry. Therefore, the sample meets the basic requirement of the survey object the ‘general employees’ of Hong Kong. Table 9 shows the nature of respondents’ jobs and the type of their organisations.

Table 9: Organisation/Business Nature Declared by Respondents

<table>
<thead>
<tr>
<th>Organisation / Business Nature</th>
<th>Number of Respondents</th>
<th>Organisation / Business Nature</th>
<th>Number of Respondents</th>
</tr>
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<tbody>
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<td>A</td>
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</tr>
<tr>
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<tr>
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<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Banking</td>
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<td>Beauty Salon</td>
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</tr>
<tr>
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<td>Building</td>
<td>1</td>
</tr>
<tr>
<td>Building Cleaning</td>
<td>1</td>
<td>Building/Estate Services</td>
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</tr>
<tr>
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<td>C</td>
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<td>Catering</td>
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<tr>
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<td>Travel</td>
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</tr>
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<tr>
<td>V</td>
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</tr>
</tbody>
</table>
Among the 562 questionnaires returned, 515 were completed by respondents, covering answers with both demographic data and work attitude data. The other 47 respondents answered all work attitude questions but missed some demographic questions and none of these 47 respondents disclosed the nature of their jobs, so these are not displayed in the above tables. Those who do appear include 515 respondents of different working classes in 153 self-declared fields of employment. Because self-declared fields are not standardised, some repetition owing to different words of the same meaning occurs. For example, 44 respondents wrote “Secondary school” on the personal data section of the form for the type of organisations they work for (under S), and one respondent wrote “Education/secondary school” (under E). In fact, the nature of the organisation for these 45 persons should be the same so that the 153 fields include many repetitions. The actual number of fields should not be as high as 153. Of course, it is very difficult to describe clearly the business and organisation of all respondents, but it is necessary to reduce the number of fields and eliminate the repetition in order to analyse such data on the computer. Therefore, the researcher checked and reviewed the businesses/industries categories defined by the Census and Statistics Department of Hong Kong and compared the business fields declared by the respondents. Eventually, the work of grouping the 153 self-declared fields into 22 standardised fields of businesses/industries was completed before data analysis (see Table 10).
### Table 10: Standardised Fields of Businesses/Industries

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<th>Different Fields of Business (Business Nature)</th>
<th>No. of Samples</th>
<th>Percent</th>
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<td>3.3</td>
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<tr>
<td>04</td>
<td>Catering, Fast-Food Stores, Restaurants</td>
<td>16</td>
<td>3.1</td>
</tr>
<tr>
<td>05</td>
<td>Community Services, District Affairs and Local Politics</td>
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<td>2.7</td>
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<td>06</td>
<td>Construction, Mechanical Assembling, Maintenance and Repairs</td>
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<td>0.4</td>
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<td>Education &amp; Training - Preschool, Primary, Secondary, Supplementary, Tertiary</td>
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</tr>
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<td>Government Departments and Agencies</td>
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</tr>
<tr>
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<td>Human Resources, Public Relations</td>
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<tr>
<td>16</td>
<td>Logistics, Goods Delivery and Transportation, Courier Services</td>
<td>12</td>
<td>2.3</td>
</tr>
<tr>
<td>17</td>
<td>Manufacturing, Printing</td>
<td>19</td>
<td>3.7</td>
</tr>
<tr>
<td>18</td>
<td>Media (Magazines, Newspapers)</td>
<td>12</td>
<td>2.3</td>
</tr>
<tr>
<td>19</td>
<td>Medical and Healthcare</td>
<td>16</td>
<td>3.1</td>
</tr>
<tr>
<td>20</td>
<td>Property (Building &amp; Estate) Management and Security</td>
<td>37</td>
<td>7.2</td>
</tr>
<tr>
<td>21</td>
<td>Public Transport and Public Utilities and Telecommunications</td>
<td>10</td>
<td>1.9</td>
</tr>
<tr>
<td>22</td>
<td>Undefined Fields and Others (Environmental, Missionary, and…….)</td>
<td>18</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>22 Categories</td>
<td>515</td>
<td>100%</td>
</tr>
</tbody>
</table>

(Source: Data provided by respondents)

The above table shows the respondents’ fields of business or industry. Each of the four biggest fields covers 50 or more respondents. They are:

- ‘Banking/Finance/Insurance/Investments’ with 50 respondents,
- ‘Education & Training - all types of Institutions with 77 respondents,
- ‘Government Departments & Agencies’ with 54 respondents, and
- ‘Import & Export / Trading’ with 56 respondents.

These four categories covered 237 respondents and accounted for 46.1 percent of the total respondents. It is quite reasonable that more people are in these fields of business because Hong Kong has been a services-oriented society and no longer an industrial one for over 30 years. Generally speaking, the above twenty-two fields of jobs, comparable to the definitions of the Census and Statistics Department, cover almost all kinds of businesses and industries in Hong Kong.
Profile of Employers, Managers, and Department Supervisors

In contrast to the bigger sample of 562 employees who expressed their work attitudes, there were only 36 employers or managers or supervisors in the sample of management people who made an evaluation of their employees’ work behaviours. Coincidentally, 18 are male and 18 are female (see Table 11). They are from only 10 of the 22 categories of business or industry (see Table 12). The numbers of employees under each of these management people ranged from 6 to 900 (see Table 13).

As Hong Kong is a services-oriented economy, the characteristics of the employees from this second data collection are very similar to those of the first data collection. Since the overall objects of the study are still general employees and not employers, the researcher did not expect to get additional personal data of these employers or management people.

Table 11: Gender of Employers / Managers / Supervisors

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>18</td>
<td>3.2</td>
<td>50.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Female</td>
<td>18</td>
<td>3.2</td>
<td>50.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>36</td>
<td>6.4</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

(Source: SPSS analysis of survey data collected for this research)

Table 12: Businesses of Employers / Managers / Supervisors

<table>
<thead>
<tr>
<th>Businesses</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Banking/ Finance/ Insurance/ Investments</td>
<td>7</td>
<td>1.2</td>
<td>19.4</td>
<td>19.4</td>
</tr>
<tr>
<td>Construction/ Maintenance/ Repairs</td>
<td>2</td>
<td>.4</td>
<td>5.6</td>
<td>25.0</td>
</tr>
<tr>
<td>Design/ Engineering/ Information Technology</td>
<td>3</td>
<td>.5</td>
<td>8.3</td>
<td>33.3</td>
</tr>
<tr>
<td>Government Departments &amp; Agencies</td>
<td>1</td>
<td>.2</td>
<td>2.8</td>
<td>36.1</td>
</tr>
<tr>
<td>Import &amp; Export/ Trading</td>
<td>6</td>
<td>1.1</td>
<td>16.7</td>
<td>52.8</td>
</tr>
</tbody>
</table>
Table 13: Number of Employees under each Employers / Manager / Supervisor

<table>
<thead>
<tr>
<th>No. of Employees</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>6</td>
<td>2</td>
<td>.4</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>2</td>
<td>.4</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>1</td>
<td>.2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>3</td>
<td>.5</td>
<td>8.3</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>1</td>
<td>.2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>3</td>
<td>.5</td>
<td>8.3</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>3</td>
<td>.5</td>
<td>8.3</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>3</td>
<td>.5</td>
<td>8.3</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>4</td>
<td>.7</td>
<td>11.1</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>1</td>
<td>.2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>30</td>
<td>3</td>
<td>.5</td>
<td>8.3</td>
</tr>
<tr>
<td></td>
<td>35</td>
<td>2</td>
<td>.4</td>
<td>5.6</td>
</tr>
<tr>
<td></td>
<td>40</td>
<td>1</td>
<td>.2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>42</td>
<td>1</td>
<td>.2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>1</td>
<td>.2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>100</td>
<td>1</td>
<td>.2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>175</td>
<td>1</td>
<td>.2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>200</td>
<td>1</td>
<td>.2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>600</td>
<td>1</td>
<td>.2</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>900</td>
<td>1</td>
<td>.2</td>
<td>2.8</td>
</tr>
</tbody>
</table>

(Source: SPSS analysis of survey data collected for this research)
4.4 Descriptive Statistics

After completion of the data collection process, the data were analysed by application of statistical methods in order to answer the research questions. To conform with the view of Sekaran (1984) that descriptive statistics need to be transformed in order to generate information to describe a set of factors in a situation, the raw data were ordered and manipulated (see Table 14). The following techniques were employed: measurement of frequencies, measurement of central tendency, and dispersion as well as standard deviation.

In the survey questionnaire, the first part was to collect some basic demographic data from the respondents in the six aspects of gender, years of service, monthly salary, age group, marital status, and education as described in the previous section.

The second part of the survey focused on attitudinal data categorised into nine sections of closed questions and followed by two optional open-ended questions. They are stated as below:

Section 1. Job satisfaction during economic downturn: 13 questions.
Section 2. Job involvement during economic downturn: 3 questions.
Section 3. Affective commitment during economic downturn: 2 questions.
Section 4. Continuance commitment during economic downturn: 2 questions.
Section 5. P-O value congruence during economic downturn: 4 questions.
Section 6. Job withdrawal intention during economic downturn: 3 questions.
Section 7. Belief about damage owing to the GFT: 1 question.
Section 8. Organisational decline is having impacts on work attitudes: 1 question.
Section 9. Organisational downsizing is having impacts on work attitudes: 1 question.

The two optional open-ended questions were:

(I) What other impacts of Economic Downturn are affecting your work status?
(II) If you have any opinion or complaint about this survey, please describe.

Table 14: Descriptive statistics – Min, Max, Mean for answers to all questions

<table>
<thead>
<tr>
<th>Respondents</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>Std. deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>339</td>
<td>2</td>
<td>7</td>
<td>4.9270</td>
<td>1.6289</td>
</tr>
<tr>
<td>Nature of Business</td>
<td>515</td>
<td>2</td>
<td>7</td>
<td>4.4181</td>
<td>1.4629</td>
</tr>
<tr>
<td>Years of services</td>
<td>516</td>
<td>2</td>
<td>7</td>
<td>4.6406</td>
<td>1.5359</td>
</tr>
<tr>
<td>Monthly salary</td>
<td>546</td>
<td>2</td>
<td>7</td>
<td>4.1263</td>
<td>1.5512</td>
</tr>
<tr>
<td>Age group</td>
<td>551</td>
<td>1</td>
<td>6</td>
<td>3.34</td>
<td>1.628</td>
</tr>
<tr>
<td>Marital status</td>
<td>547</td>
<td>2</td>
<td>6</td>
<td>1.62</td>
<td>0.485</td>
</tr>
<tr>
<td>Education</td>
<td>551</td>
<td>1</td>
<td>6</td>
<td>3.34</td>
<td>1.628</td>
</tr>
<tr>
<td>(JS-01) There are chances for advancement/promotion in economic downturn</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>3.6299</td>
<td>1.63355</td>
</tr>
<tr>
<td>(JS-02) Many achievements in work can be attained in economic downturn</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>3.7046</td>
<td>1.53449</td>
</tr>
<tr>
<td>(JS-03) My job interest is high in economic downturn</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>3.7740</td>
<td>1.54568</td>
</tr>
<tr>
<td>(JS-04) Meaningful work can be attained in economic downturn</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>3.7631</td>
<td>1.52728</td>
</tr>
<tr>
<td>(JS-05) Opportunity for personal growth is available in economic downturn</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>4.6139</td>
<td>1.53927</td>
</tr>
<tr>
<td>(JS-06) Recognition for doing a good job is attainable in economic downturn</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>4.6406</td>
<td>1.53590</td>
</tr>
<tr>
<td>(JS-07) Job esteem is attainable in economic downturn</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>4.1263</td>
<td>1.55124</td>
</tr>
<tr>
<td>(JS-08) Opportunity to meet people and interact with them can be attained in economic downturn</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>4.4181</td>
<td>1.46299</td>
</tr>
<tr>
<td>(JS-09) I accept a pay-cut instead of layoff if my organisation is downsizing</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>4.5334</td>
<td>1.79666</td>
</tr>
<tr>
<td>(JS-10) I am willing to accept benefits cut if my organisation is declining</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>4.3754</td>
<td>1.66657</td>
</tr>
<tr>
<td>(JS-11) Job security is unaffected by economic downturn</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>3.3060</td>
<td>1.76284</td>
</tr>
<tr>
<td>(JS-12) Convenient hours of work to fit my personal schedule is needed in economic downturn</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>3.8377</td>
<td>1.57586</td>
</tr>
<tr>
<td>(JS-13) Comfortable work conditions are attainable in economic downturn</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>3.4093</td>
<td>1.57174</td>
</tr>
<tr>
<td>(JS-14) I am concerned about job status—job title, workload and work hours</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>4.9377</td>
<td>1.58715</td>
</tr>
<tr>
<td>(JS-15) I am trying to use my ability &amp; knowledge to work for my organisation if my benefits have been cut</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>4.0217</td>
<td>1.37919</td>
</tr>
<tr>
<td>(JS-16) I am trying to influence co-worker to work positively in times of adversity</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>3.1281</td>
<td>1.35287</td>
</tr>
<tr>
<td>(JC-17) I am willing to take additional responsibility during difficult times</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>4.2049</td>
<td>1.37366</td>
</tr>
<tr>
<td>(JC-18) I don’t mind without the assistance from helpers or subordinates</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>4.7776</td>
<td>1.43767</td>
</tr>
<tr>
<td>(JC-19) Feedback—concerning the results of work is important in adversity</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>3.2631</td>
<td>1.28442</td>
</tr>
<tr>
<td>(JC-20) Avoid making error at work against loss is to the interest of society</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>3.2794</td>
<td>1.41871</td>
</tr>
<tr>
<td>(PO-21) To match personal &amp; organisation values is important in adversity</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>3.1868</td>
<td>1.29677</td>
</tr>
<tr>
<td>(PO-22) My loyalty to work is able to influence others in the organisation</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>4.8274</td>
<td>1.44554</td>
</tr>
<tr>
<td>(PO-23) Pleasant and agreeable attitudes among co-workers are important</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>3.7349</td>
<td>1.28303</td>
</tr>
<tr>
<td>(PO-24) Fair and considerable boss can lead people to get through adversity</td>
<td>256</td>
<td>7</td>
<td>7</td>
<td>3.8590</td>
<td>1.25870</td>
</tr>
<tr>
<td>(PW-25) During economic downturn, I tend to leave the organisation if my workload is heavier than before</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>3.3772</td>
<td>1.45890</td>
</tr>
<tr>
<td>(PW-26) During economic downturn, I tend to leave the organisation if my salary has been cut</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>3.5676</td>
<td>1.50692</td>
</tr>
<tr>
<td>(PW-27) During economic downturn, I tend to leave the organisation if my benefits have been cut due to poor business result of the organisation</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>3.4838</td>
<td>1.39287</td>
</tr>
<tr>
<td>(BFT) Do you believe the damages of global financial tsunami can change your perspective toward your well-being in the workplace?</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>4.9270</td>
<td>1.53277</td>
</tr>
<tr>
<td>(ODC) Organisational decline affects your work attitudes</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>4.4786</td>
<td>1.53987</td>
</tr>
<tr>
<td>(ODX) Organisational downsizing affects your work attitudes</td>
<td>562</td>
<td>7</td>
<td>7</td>
<td>4.8815</td>
<td>1.49051</td>
</tr>
</tbody>
</table>

Valid N (list wise) 551

(Source: SPSS analysis of survey data collected for this research)

The frequency table (Table 15) shows how the 562 respondents expressed their work attitudes in response to the 30 survey questions, and tallies the number of persons who marked their answers on each of the seven points/degrees of the scale:

1 stands for ‘strongly disagree/disbelieve’; 2 for ‘quite disagree/disbelieve’; 3 for ‘slightly disagree/disbelieve’; 4 for ‘neutral’; 5 for ‘slightly agree/believe’; 6 for ‘quite agree/believe’; and 7 for ‘strongly agree/believe’.
Additional interpretation: 1 to 3 reflect negative work attitudes, 4 represents neither negative nor positive, and 5 to 7 express positive work attitudes.

Table 15: Frequency for all Attitude Variables

<table>
<thead>
<tr>
<th>Strongly Disagree (1)</th>
<th>Quite Disagree (2)</th>
<th>Slightly Disagree (3)</th>
<th>Neutral (4)</th>
<th>Slightly Agree (5)</th>
<th>Quite Agree (6)</th>
<th>Strongly Agree (7)</th>
<th>Total Samples Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS-01 There are chances for advancement / promotion in economic downturn</td>
<td>77</td>
<td>70</td>
<td>109</td>
<td>121</td>
<td>121</td>
<td>41</td>
<td>54</td>
</tr>
<tr>
<td>JS-02 Many achievements in work can be attained in economic downturn</td>
<td>13.7</td>
<td>12.5</td>
<td>19.4</td>
<td>21.5</td>
<td>21.5</td>
<td>7.3</td>
<td>4.1</td>
</tr>
<tr>
<td>JS-03 My job interest is high in economic downturn</td>
<td>58</td>
<td>63</td>
<td>128</td>
<td>138</td>
<td>104</td>
<td>55</td>
<td>16</td>
</tr>
<tr>
<td>JS-04 Meaningful work can be attained in economic downturn</td>
<td>10.3</td>
<td>11.2</td>
<td>22.8</td>
<td>24.6</td>
<td>18.5</td>
<td>9.8</td>
<td>2.8</td>
</tr>
<tr>
<td>JS-05 Opportunity for personal growth is available in economic downturn</td>
<td>48</td>
<td>59</td>
<td>103</td>
<td>133</td>
<td>101</td>
<td>57</td>
<td>21</td>
</tr>
<tr>
<td>JS-06 Recognition for doing a good job is attainable in economic downturn</td>
<td>8.5</td>
<td>14.1</td>
<td>18.3</td>
<td>27.2</td>
<td>18.0</td>
<td>10.1</td>
<td>3.8</td>
</tr>
<tr>
<td>JS-07 Job esteem is attainable in economic downturn</td>
<td>52</td>
<td>74</td>
<td>112</td>
<td>143</td>
<td>104</td>
<td>51</td>
<td>26</td>
</tr>
<tr>
<td>JS-08 Opportunity to meet people and interact with them can be attained in economic downturn</td>
<td>9.3</td>
<td>13.2</td>
<td>19.9</td>
<td>23.4</td>
<td>18.5</td>
<td>9.1</td>
<td>4.6</td>
</tr>
<tr>
<td>JS-09 I accept a pay-cut instead of layoff if my organisation is downsizing</td>
<td>21</td>
<td>37</td>
<td>69</td>
<td>115</td>
<td>150</td>
<td>109</td>
<td>61</td>
</tr>
<tr>
<td>JS-10 I endeavor to use my ability &amp; knowledge to work for my organisation</td>
<td>3.7</td>
<td>6.6</td>
<td>12.3</td>
<td>20.5</td>
<td>26.7</td>
<td>19.4</td>
<td>10.8</td>
</tr>
<tr>
<td>JS-11 Job security is unaffected by economic downturn</td>
<td>8</td>
<td>46</td>
<td>62</td>
<td>101</td>
<td>105</td>
<td>120</td>
<td>84</td>
</tr>
<tr>
<td>JS-12 Convenient hours of work to fit my personal schedule is needed in economic downturn</td>
<td>4.5</td>
<td>48</td>
<td>6.0</td>
<td>10.0</td>
<td>18.7</td>
<td>21.4</td>
<td>14.9</td>
</tr>
<tr>
<td>JS-13 Comfortable work conditions are attainable in economic downturn</td>
<td>7</td>
<td>5.7</td>
<td>12.6</td>
<td>22.0</td>
<td>23.0</td>
<td>17.6</td>
<td>9.8</td>
</tr>
<tr>
<td>JT-14 I am concerned about job status—job title, workload and working hours</td>
<td>108</td>
<td>105</td>
<td>106</td>
<td>96</td>
<td>74</td>
<td>43</td>
<td>30</td>
</tr>
<tr>
<td>JT-15 I endeavor to use my ability &amp; knowledge to work for my organisation</td>
<td>19.2</td>
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<td>JW-27 During economic downturn, I tend to leave the organisation if my benefits have been cut due to poor business result of the organisation</td>
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Do you believe the damages of global financial tsunami can change your perspective toward your well-being in the workplace?

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Organisational decline affects your work attitudes

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Organisational downsizing affects your work attitudes

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</tbody>
</table>

(Source: SPSS analysis of survey data collected for this research)

Interpretations of the findings in Table 15:

JS-01 (There are chances for advancement or promotion in Economic Downturn)
Of the 562 respondents, 256 persons (77+70+109) did not believe that there were chances for advancement / promotion during the GFT; and 185 persons (121+41+23) believed that there were still chances at that time; and 121 persons did not take sides. On the whole, there were more people with a negative attitude on this matter.

JS-02 (Many achievements in work can be attained in Economic Downturn)
Among the 562 respondents, 249 persons (58+63+128) did not believe that many achievements in work could be attained during the GFT; and 175 persons (104+55+16) believed that achievements in work could still be attained at that time; and 138 persons did not take sides. On the whole, there were more people with a negative attitude on this matter.

JS-03 (My job interest is high in Economic Downturn)
Of the 562 respondents, 230 persons (48+79+103) did not believe that job interest was high during the GFT; and 179 persons (101+57+21) believed that job interest was still high at that time; and 153 persons did not take sides. On the whole, there were more people with a negative attitude on this matter.

JS-04 (Meaningful work can be attained in Economic Downturn)
Among the 562 respondents, 238 persons (52+74+112) did not believe that meaningful work could be attained during the GFT; and 181 persons (104+51+26) believed that meaningful work could still be attained at that time; and 143 persons did not take sides. On the whole, there were more people with a negative attitude on this matter.
JS-05 (Opportunity for personal growth is available in Economic Downturn)
Of the 562 respondents, only 127 persons (21+37+69) did not believe that opportunity for personal growth was available during the GFT; and 320 persons (150+109+61) believed that opportunity for personal growth was still available at that time; and 115 persons did not take sides. On the whole, there were more people with a positive attitude on this matter. It is possible that adversity experiences can help personal growth.

JS-06 (Recognition for doing a good job is attainable in Economic Downturn)
Among the 562 respondents, only 124 persons (17+45+62) did not believe that recognition for doing a good job was attainable during the GFT; and 324 persons (144+121+59) believed that recognition for doing a good job was attainable at that time; and 114 persons do not take sides. On the whole, there were more people with a positive attitude on this matter. Job recognition is a kind of encouragement that must be especially important during periods of adversity.

JS-07 (Job esteem is attainable in Economic Downturn)
Of the 562 respondents, 183 persons (37+49+97) did not believe that job esteem was attainable during the GFT; and 234 persons (126+73+35) believed that job esteem was still attainable at that time; and 145 persons do not take sides. On the whole, there were more people with a positive attitude on this matter.

JS-08 (Opportunity to meet people and interact with them can be attainable in Economic Downturn)
Among the 562 respondents, only 130 persons (22+36+72) did not believe that opportunities to meet people and interact with them could be attained during the GFT; and 272 persons (146+79+47) believed that that kind of opportunity could still be attained in economic downturn; and 160 persons did not take sides. On the whole, there were more people with a positive attitude on this matter.

JS-09 (I accept a pay-cut instead of layoff if my organisation is downsizing)
Of the 562 respondents, 152 persons (44+46+62) disagreed with the statement that they would accept a pay-cut instead of layoff if their organisations were downsizing during the GFT; and 309 persons (105+120+84) agreed that they would have accepted
a pay cut under such conditions; and 101 persons did not take sides. On the whole, it can be observed that there were overwhelmingly more people with a positive attitude about this negative event and it is explicit that most employees want to keep their jobs in a worsening economy.

JS-10 (I am willing to accept benefits-cut if my organisation is declining)
Among the 562 respondents, 155 persons (42+42+71) disagreed with the statement that they would accept a benefit cut if their organisation were declining during the GFT; and 283 persons (129+99+55) agreed that they would accept a benefits cut under such conditions; and 124 persons did not take sides. On the whole, there were more people with a positive attitude about this negative event, similar to the above situation.

JS-11 (Job security is unaffected by Economic Downturn)
Of the 562 respondents, 319 persons (108+105+106) did not believe that job security was unaffected by an economic downturn during the GFT; and only 147 persons (74+43+30) believed that job security was unaffected under such situations; and 96 persons did not take sides. On the whole, there were overwhelmingly more people with a negative attitude about this situation.

JS-12 (Convenient hours of work to fit my personal schedule is needed in Economic Downturn)
Among the 562 respondents, 209 persons (47+77+85) disagreed that convenient hours of work to fit their own schedule were needed in an economic downturn during the GFT; and 187 persons (105+51+31) agreed that convenient hours of work were still needed even under such situations; and 166 persons did not take sides. On the whole, there were more people with a negative attitude on this matter.

JS-13 (Comfortable work conditions are attainable in Economic Downturn)
Of the 562 respondents, 293 persons (80+88+125) did not believe that comfortable work conditions were attainable in an economic downturn during the GFT; and 139 persons (87+34+18) believed that comfortable work conditions were still attainable under such situations; and 130 persons did not take sides. On the whole, there were overwhelmingly more people with a negative attitude on this matter.
JI-14 (I am concerned about job status—job title, workload and work hours)
Among the 562 respondents, only 78 persons (9+28+41) disagreed with the statement that they were concerned about job status—job title, workload and work-hours in an economic downturn during the GFT; and 366 persons (156+135+75) agreed that they were concerned about job status under such situations; and 118 persons did not take sides. On the whole, there were overwhelmingly more people with a positive attitude on this status.

JI-15 (I endeavour to use my ability and knowledge to work for my organisation)
Of the 562 respondents, only 50 persons (8+19+23) disagreed with the statement that they would endeavour to use their ability and knowledge to work for their organisations during the GFT; and 435 persons (123+186+126) agreed that they would endeavour to do that under such situations; and 77 persons did not take sides. On the whole, there were overwhelmingly more people with a positive attitude on this matter.

JI-16 (I will try to influence co-workers to work positively in times of adversity)
Among the 562 respondents, only 58 persons (8+23+27) disagreed with the statement that they would try to influence co-workers to work positively in times of adversity during the GFT; and 407 persons (169+152+86) agreed that they would try to influence co-workers positively under such situations; and 97 persons did not take sides. On the whole, there were overwhelmingly more people with a positive attitude on this matter.

AC-17 (I am willing to take additional responsibilities during difficult times)
Of the 562 respondents, only 69 persons (11+23+35) disagreed with the statement that they were willing to take additional responsibilities in difficult times during the GFT; and 395 persons (171+153+71) agreed that they were willing to take additional responsibilities under such situations; and 98 persons did not take sides. On the whole, there were overwhelmingly more people with a positive attitude on this matter.

AC-18 (I don’t mind being without the assistance of helpers or subordinates or I can do my job independently without others’ help)
Among the 562 respondents, only 91 persons (19+28+44) disagreed with the statement that they could do without the assistance of helpers or subordinates to do their jobs during the GFT; and 352 persons (157+147+48) agreed that they did not mind being without others’ help in their jobs under such situations; and 119 persons did not take sides. On the whole, there were overwhelmingly more people with a positive attitude on this matter.

CC-19 (Feedback concerning the results of work is important in adversity)
Of the 562 respondents, only 50 persons (5+17+28) did not believe that feedback concerning the results of work was important in adversity during the GFT; and 426 persons (150+190+86) believed that feedback concerning the results of work was important in adversity; and 86 persons did not take sides. On the whole, there were overwhelmingly more people with a positive attitude on this issue.

CC-20 (Avoid making error at work against loss is to the interests of society)
Among the 562 respondents, only 58 persons (10+19+29) did not believe that avoiding making an error at work against loss was to the interests of society during the GFT; and 415 persons (132+165+118) believed that avoid-making error against loss was to the interests of society in an economic downturn; and 89 persons did not take sides. On the whole, there were overwhelmingly more people with a positive attitude on this matter.

PO-21 (To match personal and organisational values is important in adversity)
Of the 562 respondents, only 55 persons (1+15+39) disagreed with the statement that matching personal and organisational values was important in adversity during the GFT; and 395 persons (151+144+100) agreed that matching personal and organisational values was important under such situations; and 112 persons did not take sides. On the whole, there were overwhelmingly more people with a positive attitude on this issue.

PO-22 (My loyalty to work is able to influence others in the organisation)
Among the 562 respondents, only 90 persons (19+18+53) disagreed with the statement that their loyalty to work was able to influence others in the organisation during the GFT; and 350 persons (154+132+64) agreed that their loyalty to work was
able to influence others in the organisation under such conditions; and 122 persons
did not take sides. On the whole, there were overwhelmingly more people with a
positive attitude on this matter.

PO-23 (Pleasant and agreeable attitudes among co-workers are important)
Of the 562 respondents, only 39 persons (3+10+26) did not believe that pleasant and
agreeable attitudes among co-workers were important during the GFT; and 473
persons (103+182+188) believed that pleasant and agreeable attitudes among co-
workers were important under such conditions; and 51 persons did not take sides. On
the whole, there were overwhelmingly more people with a positive attitude on this
matter.

PO-24 (Fair and considerate boss can lead people to get through adversity)
Among the 562 respondents, only 33 persons (1+12+20) did not believe that a fair and
considerate boss could lead people to get through adversity during the GFT; and 479
persons (72+181+226) believed that a fair and considerate boss could lead people to
get through adversity under such situations; and 50 persons did not take sides. On the
whole, there were overwhelmingly more people with a positive attitude on this
matter.

JW-25 (During Economic Downturn, I tend to leave the organisation if my workload
is heavier than before)
Of the 562 respondents, 310 persons (56+105+149) disagreed with the statement that
they would tend to leave their organisations if their workload was heavier than before
the GFT; and only 113 persons (66+30+17) agreed that they would tend to leave if
their workload was heavier than before such situations; and 139 persons did not take
sides. On the whole, there were overwhelmingly more people with a positive attitude
on this negative event. In other words, more people were pessimistic under an
economic downturn so that they would mostly tend to stay and keep their existing
jobs even facing heavier workload than before.

JW-26 (During Economic Downturn, I tend to leave the organisation if my salary has
been cut)
Among the 562 respondents, 280 persons (51+86+143) disagreed that they would
tend to leave their organisations if their salaries were cut during the GFT; and 143
persons (83+38+22) agreed that they would tend to leave their organisations under such conditions; and 139 persons did not take sides. On the whole, there were more people with a positive attitude on this negative event. In other words, more people were pessimistic under an economic downturn so that they mostly said they would tend to stay and keep their existing jobs in their organisations even if they suffered salary cuts.

JW-27 (During Economic Downturn, I tend to leave the organisation if my benefits have been cut due to the poor business result of the organisation)
Of the 562 respondents, 277 persons (49+88+140) disagreed with the statement that they would tend to leave their organisations if their benefits had been cut during the GFT; and only 119 persons (74+35+10) agreed that they would tend to leave their organisations under such conditions; and 166 persons did not take sides. On the whole, there were more people with a positive attitude on this negative event. In other words, more people were pessimistic under an economic downturn so that they mostly tend to stay and keep their existing jobs in their organisations even if they suffered benefits cuts.

BFT (Do you believe the damages of ‘global financial tsunami’ can change your perspective toward your wellbeing in the workplace?)
Among the 562 respondents, only 89 persons (23+24+42) did not believe that the damage due to the GFT could change their perspective toward their wellbeing in the workplace; and 374 persons (150+142+82) believed that the damage could change their perspective toward their wellbeing under such conditions; and 99 persons did not take sides. On the whole, there were overwhelmingly more people having a negative attitude on this question. Their overwhelming belief about damage from the ‘Global Financial Tsunami’ indicated their pessimistic feelings under such conditions.

ODC (Do you agree that organisational decline affects your attitudes / feelings in the workplace?)
Of the 562 respondents, only 129 persons (25+47+57) disagreed with the statement that ‘Organisational Decline’ would affect their attitudes / feelings in the workplace during the GFT; and 299 persons (154+94+51) agreed that ‘Organisational Decline’ would affect their attitudes / feelings in the workplace under such conditions; and 134
persons did not take sides. On the whole, more people had a negative attitude on this question, meaning more people agreed that the phenomenon of ‘Organisational Decline’ would affect their attitudes / feelings in the workplace.

ODS (Do you agree that organisational downsizing affects your attitudes / feelings in the workplace?)
Among the 562 respondents, only 102 persons (16+45+41) disagreed that ‘Organisational Downsizing’ affected their attitudes / feelings in the workplace during the GFT; and 332 persons (162+110+60) agreed that ‘Organisational Downsizing’ affected their attitudes / feelings in the workplace under such situations; and 128 persons did not take sides. On the whole, more people had a negative attitude on this question, meaning more people agreed that the phenomenon of ‘Organisational Downsizing’ affected their attitudes / feelings in the workplace.

From the above simple descriptive statements, it can be seen that the majority of employees in Hong Kong had negative attitudes toward their work environments but they had positive attitudes toward their own jobs. In general, they were diligent people even under negative environmental and organisational conditions during the GFT in Hong Kong.

4.5 Analysis of Research Variables

It was learned from the review of the literature that environmentally related factors have impacts on people’s attitudes regarding related attitude objects as predictors of single and multiple behaviours. Influenced by certain external events, there is a general agreement that an individual’s attitudes toward some objects constitute predispositions on his or her part to respond to the objects in a consistently favourable or unfavourable manner. This view stems from the widespread assumption that attitudes and overt behaviour are closely related to each other (Allport 1935; Fishbein & Ajzen 1974).
4.5.1 Data Analysis: Identification of Key Variables

In the study of the six dimensions of work behaviour, it is necessary to first measure the six related work attitudes. Of these dimensions, the researcher identified that ‘job satisfaction attitude’ could be measured by 13 intervening variables adopted from Elizur’s 24-item questionnaire model; ‘job involvement attitude’ could be measured by three intervening variables; ‘affective commitment attitude’ by two intervening variables; ‘continuance commitment attitude’ by two intervening variables; and ‘P-O value congruence attitude’ by four intervening variables. Thus, the 24 intervening variables are totally applied in this context. Besides the above 24 items of Elizur, three additional intervening variables (‘During economic recession, I tend to leave the organisation if my workload is heavier than before’, ‘During economic recession, I tend to leave the organisation if my salary has been cut’, and ‘During economic recession, I tend to leave the organisation if my benefits have been cut’) have also been developed to measure employees’ ‘job withdrawal intention attitude’ for data analysis in this chapter. It is assumed that these 27 intervening variables reflected by certain work attitude objects would trigger six work attitudes to predict the related six dimensions of work behaviours under study.

In addition to the above 27 intervening variables, three independent variables, ‘Belief about the damages of the Global Financial Tsunami’, perception about ‘Organisational Decline’, and perception about ‘Organisational Downsizing’ were identified to show the degree of impact on employees’ work attitudes and in turn to influence the dependent variables of the six dimensions of work behaviours for the analysis of these outcome variables.

Since there were so many different ‘variables and items’, it was necessary to further clarify all of them before conducting hypotheses testing. To minimise doubt, the researcher made the following descriptions to define such ‘variables and items’ since some of them have different names but with same meanings:

1. GFT environmentally related three factors = three independent variables.
2. Work Attitudes reflected by work attitude objects (27 items) = twenty-seven intervening variables.
(3) Work Behaviours of the six Dimensions = *six dependent variables* meaning ‘work behavioural variables’ or ‘work outcome variables’ in this study.

The construct of the relationships between these three types of variables is shown in Figure 29 as below:

**Figure 29: Three Types of Variables of the Model**

- **Independent variables**
- **Intervening variables**
- **Dependent variables**

(3 GFT environmentally related factors) (27 Work attitudes reflected by 27 objects) (6 dimensions of work behaviours)

(Source: Developed for this research)

*The Nature of Independent Variables*

A variable that can influence another variable is called an independent variable. There is a causal relationship between two such variables. That is, changes to the former can cause changes to the latter. In other words, the former is also a predictor to determine the latter. Therefore, the independent variables in this research are the three environmentally related factors that presumably have influenced employees’ work attitudes as described in the previous chapters.

*The Nature of Intervening Variables*

Generally, a given variable may be said to function as a mediator to the extent that it accounts for the relationship between the predictor and the behavioural criterion. Mediators explain how external physical events take on internal psychological significance. According to Baron and Kenny (1986), a mediator will function when it meets the following criteria: (a) variations in levels of the independent variables significantly accounts for variations in the presumed mediator, and (b) variations in the mediator significantly account for variations in the dependent variables. Hence, the central idea in the above construct of relationships is that the effects of stimuli of the GFT-related factors on work behaviours are mediated or intervened by various work attitudes against relative attitude objects. In other words, this model suggests that GFT events, work attitudes, and work behaviours are interrelated in a sequential manner. GFT events determine work attitudes, and work attitudes in turn influence work behaviours to some extent. Therefore, work attitudes are conceived of as
mediating/intervening variables between GFT events and work behaviours. The implication of this model is that if work attitudes were eliminated, any empirical relationship previously observed between the GFT factors and work behaviours would disappear (Eckhardt & Ermann, 1977). Alternatively speaking, if people do not previously form any kind of work attitudes; related work behaviours will not be actualised.

*The Nature of Dependent Variables*

Dependent variables are influenced by other variables (Sapsford 2007). In this context, the six dimensions of work behaviour are defined as the dependent variables since which are directly influenced by the 27 work attitude variables (the abovementioned intervening variables).

4.5.2 The Process of Data Reduction (Selection of Surrogate Variables)

4.5.2.1 Factor Analysis for Intervening Variables of Job Satisfaction and P-O value congruence

The total number of variables in this study was 36 (factors / items) = (3 independent variables + 27 intervening variables + 6 dependent variables). In order to summarise the relationships between such variables (except for the three independent variables), a ‘Principal Components Analysis (PCA)’ also known as ‘Factor Analysis’ was undertaken. To run this kind of analysis, it is important that the research sample size be large enough to enable the correlations to be reliably estimated. With respect to a reliable sample size, Manning and Munro (2007) argue that samples of 30 are very poor, samples of 100 are poor, samples of 500 are very good, and samples of 1,000 are excellent. In view of this research containing a valid sample size of 562, it is appropriate to enter into a factor analysis if each group or sub-group is composed of four or more variables.

Among the 27 intervening variables, 13 of them represented the group of ‘job satisfaction attitude’, and 4 of them represented the group of ‘P-O value congruence attitude’. Data reduction needed for these 2 groups. Hence, factor analysis was used to reduce the number of variables into a small set of major factors that could represent
the entire group of related variables. Logically, if variables are highly correlated, we can presume that they are measuring the same aspect of a situation.

(A) Factor Analysis applied to Job Satisfaction Attitude –13 items

Firstly, the factor analysis begins by testing the group of 13 variables representing ‘job satisfaction attitude’ by using SPSS 16.0. As shown in the correlation matrix (Table 16), 11 (JS-01 to JS-08, and JS-11 to JS-13) of the 13 variables are significantly interrelated and only 2 (JS-09 and JS-10) are not significantly related. On the whole, there are many sizable correlations that exceed 0.30. As shown in the Table 17a of KMO and Bartlett’s test to measure the sampling adequacy and the chi-square value, the KMO figure 0.822 is greater than 0.60 and there is a large chi-square value of 2789.288 which is highly significant as p<0.05. Based on these criteria, it is appropriate to apply factor analysis to this data set.

Table 16: Pearson’s Correlation Coefficient (Job Satisfaction 13 intervening variables)

<table>
<thead>
<tr>
<th>Attitudinal Variables</th>
<th>JS-01</th>
<th>JS-02</th>
<th>JS-03</th>
<th>JS-04</th>
<th>JS-05</th>
<th>JS-06</th>
<th>JS-07</th>
<th>JS-08</th>
<th>JS-09</th>
<th>JS-10</th>
<th>JS-11</th>
<th>JS-12</th>
<th>JS-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS-01</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-02</td>
<td>.701**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-03</td>
<td>.472**</td>
<td>.535**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-04</td>
<td>.469**</td>
<td>.550**</td>
<td>.683**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-05</td>
<td>.368**</td>
<td>.344**</td>
<td>.361**</td>
<td>.467**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-06</td>
<td>.343**</td>
<td>.380**</td>
<td>.481**</td>
<td>.461**</td>
<td>.522**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-07</td>
<td>.419**</td>
<td>.440**</td>
<td>.499**</td>
<td>.516**</td>
<td>.425**</td>
<td>.567**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-08</td>
<td>.358**</td>
<td>.335**</td>
<td>.368**</td>
<td>.418**</td>
<td>.453**</td>
<td>.364**</td>
<td>.490**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>JS-09</td>
<td>.055</td>
<td>.053</td>
<td>.150**</td>
<td>.145**</td>
<td>.164**</td>
<td>.162**</td>
<td>.132**</td>
<td>.236**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-10</td>
<td>.050</td>
<td>.052</td>
<td>.158**</td>
<td>.158**</td>
<td>.184**</td>
<td>.187**</td>
<td>.133**</td>
<td>.221**</td>
<td>.710**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-11</td>
<td>.260**</td>
<td>.285**</td>
<td>.269**</td>
<td>.282**</td>
<td>.143**</td>
<td>.197**</td>
<td>.344**</td>
<td>.270**</td>
<td>.080</td>
<td>.184**</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-12</td>
<td>.212**</td>
<td>.177**</td>
<td>.184**</td>
<td>.193**</td>
<td>.214**</td>
<td>.102**</td>
<td>.204**</td>
<td>.255**</td>
<td>.139**</td>
<td>.170**</td>
<td>.256**</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>JS-13</td>
<td>.297**</td>
<td>.258**</td>
<td>.225**</td>
<td>.251**</td>
<td>.222**</td>
<td>.219**</td>
<td>.338**</td>
<td>.221**</td>
<td>-.043</td>
<td>-.008</td>
<td>.246**</td>
<td>.443**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)
(Source: Analysis of survey data collected for this research)
Table 17a. KMO and Bartlett’s Test for JS 13 variables

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</th>
<th>.822</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td>Approx. Chi-Square</td>
</tr>
<tr>
<td></td>
<td>2789.288</td>
</tr>
<tr>
<td>df</td>
<td>78.000</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

(Source: SPSS analysis of survey data collected for this research)

The following communalities Table 17b shows that the variance in the variables accounted for the factors extracted. According to Manning and Munro (2007), the larger the communality (over 0.30) for a variable the better that variable is explained by a small number of factors extracted. In this case, all of the communalities are greater than 0.30 so that factor analysis is likely to be a good solution.

Table 17b: Communalities for JS 13 items

<table>
<thead>
<tr>
<th></th>
<th>Initial</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS-01</td>
<td>1.000</td>
<td>.549</td>
</tr>
<tr>
<td>JS-02</td>
<td>1.000</td>
<td>.599</td>
</tr>
<tr>
<td>JS-03</td>
<td>1.000</td>
<td>.608</td>
</tr>
<tr>
<td>JS-04</td>
<td>1.000</td>
<td>.645</td>
</tr>
<tr>
<td>JS-05</td>
<td>1.000</td>
<td>.441</td>
</tr>
<tr>
<td>JS-06</td>
<td>1.000</td>
<td>.539</td>
</tr>
<tr>
<td>JS-07</td>
<td>1.000</td>
<td>.571</td>
</tr>
<tr>
<td>JS-08</td>
<td>1.000</td>
<td>.446</td>
</tr>
<tr>
<td>JS-09</td>
<td>1.000</td>
<td>.810</td>
</tr>
<tr>
<td>JS-10</td>
<td>1.000</td>
<td>.824</td>
</tr>
<tr>
<td>JS-11</td>
<td>1.000</td>
<td>.347</td>
</tr>
<tr>
<td>JS-12</td>
<td>1.000</td>
<td>.704</td>
</tr>
<tr>
<td>JS-13</td>
<td>1.000</td>
<td>.654</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis

(Source: SPSS analysis of survey data collected for this research)
When factor analysis was applied in this case, we had to find a relatively small number of the underlying factors to explain much of the variation in scores across the 13 items (Table 17c) below. Those factors with eigenvalues greater than 1 could be chosen as they explain more variation in this construct. Therefore, the Principal Components Analysis (PCA) could extract three factors. From the columns of ‘Extraction Sums of Squared Loadings’, it is clear that component one explains 36.644 percent of the variance, component two, 13.148 percent, and component three, 9.726 percent of the variance in the original variables. That is, these three components explain 59.518 percent of the total variance in the original set of variables.

Table 17c: Total Variance Explained for JS 13 items

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>4.764</td>
<td>36.644</td>
</tr>
<tr>
<td>2</td>
<td>1.709</td>
<td>13.148</td>
</tr>
<tr>
<td>3</td>
<td>1.264</td>
<td>9.726</td>
</tr>
<tr>
<td>4</td>
<td>.944</td>
<td>7.258</td>
</tr>
<tr>
<td>5</td>
<td>.804</td>
<td>6.185</td>
</tr>
<tr>
<td>6</td>
<td>.681</td>
<td>5.238</td>
</tr>
<tr>
<td>7</td>
<td>.606</td>
<td>4.664</td>
</tr>
<tr>
<td>8</td>
<td>.567</td>
<td>4.359</td>
</tr>
<tr>
<td>9</td>
<td>.460</td>
<td>3.538</td>
</tr>
<tr>
<td>10</td>
<td>.361</td>
<td>2.781</td>
</tr>
<tr>
<td>11</td>
<td>.305</td>
<td>2.347</td>
</tr>
<tr>
<td>12</td>
<td>.276</td>
<td>2.120</td>
</tr>
<tr>
<td>13</td>
<td>.259</td>
<td>1.993</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis
(Source: SPSS analysis of survey data collected for this research)

Besides the variance analysis, the Scree Plot in Chart 2 is an alternative method not only for deciding how many components should be considered, but also for further reducing the number of components from the number that might be accepted on the basis of the eigenvalues. Manning and Munro (2007) explain that the rule of interpretation of the scree plot is to consider only those few components which are not
on the flat horizontal section of the chart. It is apparent that a sharp drop from the value of the first component tells the appropriateness to extract component one.

Chart 2: Scree Plot for Job Satisfaction 13 items

![Scree Plot](chart2.png)

(Source: SPSS analysis of survey data collected for this research)

The following ‘Component Matrix Table’ and ‘Rotated Component Matrix Table’ examine component loadings. However, the second one (Table 17e) using Varimax with Kaiser Normalisation is easier to interpret than Table 17d.

It is clear from the component matrix in Table17d that items JS-04, 07, 03, 02, 01, 06, 08, and 05 all have loadings only on component one, and not on the other two. Item JS-09 has a loading only on component two, the other items JS-11, 10, 12, and 13 all have loadings on more than one component. That is, most items are on component one only. The item with the heaviest loading (0.774) on component one is item JS-04.
Table 17d: Component Matrix for JS 13 items

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS-04</td>
<td>.774</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-07</td>
<td>.751</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-03</td>
<td>.745</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-02</td>
<td>.715</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-01</td>
<td>.692</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-06</td>
<td>.680</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-08</td>
<td>.652</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-05</td>
<td>.648</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-11</td>
<td>.466</td>
<td>.358</td>
<td></td>
</tr>
<tr>
<td>JS-09</td>
<td></td>
<td>.858</td>
<td></td>
</tr>
<tr>
<td>JS-10</td>
<td>.304</td>
<td>.855</td>
<td></td>
</tr>
<tr>
<td>JS-12</td>
<td>.398</td>
<td></td>
<td>.734</td>
</tr>
<tr>
<td>JS-13</td>
<td>.457</td>
<td></td>
<td>.624</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis
3 components extracted
(Source: SPSS analysis of survey data collected for this research)

Meanwhile, the rotated component matrix table below (Tables 17e and 17f), clearly shows that most items are on component one, and there are only two or three items on the other components. Since a component with less than four items’ loadings is not appropriate, we have to focus on component one only. The item with the heaviest loading (0.790) on component one is also the item JS-04 (‘meaningful work can be attained in economic downturn’). That is, item JS-04 provides the greatest clue as to what component one might represent. In this case, it appears that component one is measuring something relating to the degree of ‘meaningful work and job esteem during an economic downturn’. If one refers back to the Pearson’s Correlation Matrix (Table 16), it can be seen that JS-04 has highly statistically significant relationships with all of the other 12 variables and the components of this group are highly and positively correlated with each other. It is therefore appropriate to select JS-04 as the surrogate variable representing the group of ‘job satisfaction attitude’.
Table 17e: Rotated Component Matrix for JS 13 items

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS-04</td>
<td>.790</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-03</td>
<td>.770</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-02</td>
<td>.745</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-06</td>
<td>.716</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-07</td>
<td>.706</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-01</td>
<td>.691</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-05</td>
<td>.637</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JS-08</td>
<td>.548</td>
<td>.899</td>
<td></td>
</tr>
<tr>
<td>JS-10</td>
<td></td>
<td>.899</td>
<td></td>
</tr>
<tr>
<td>JS-09</td>
<td></td>
<td>.895</td>
<td></td>
</tr>
<tr>
<td>JS-12</td>
<td></td>
<td>.823</td>
<td></td>
</tr>
<tr>
<td>JS-13</td>
<td></td>
<td>.766</td>
<td></td>
</tr>
<tr>
<td>JS-11</td>
<td></td>
<td>.509</td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalisation
Rotation converged in 4 iterations
(Source: SPSS analysis of survey data collected for this research)
Table 17f: Component Transformation Matrix for JS 13 items

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.898</td>
<td>.206</td>
<td>.389</td>
</tr>
<tr>
<td>2</td>
<td>-.196</td>
<td>.978</td>
<td>-.066</td>
</tr>
<tr>
<td>3</td>
<td>-.395</td>
<td>-.017</td>
<td>.919</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis
Rotation Method: Varimax with Kaiser Normalisation
(Source: SPSS analysis of survey data collected for this research)

(B) Factor Analysis on P-O Value Congruence Attitude – four items
The second group of variables, needed to test whether a factor analysis is appropriate, is the four-item intervening variables of the ‘P-O Value Congruence Attitude (PO-21 to PO-24)’. From the correlation matrix table below (Table 17g), it is clear that all variables are significantly correlated. Meanwhile, Bartlett’s test (Table 17h) shows the overall significance as sig. is at 0.000, and the Kaiser-Meyer-Olkin measure of sampling adequacy (MSA) is 0.752, which is greater than the required critical level of 0.6 so that it is appropriate to run a factor analysis. For further examination, the Anti-image matrices (Table 17i) indicates that all MSA are well above the acceptable level of 0.5 (i.e. 0.809, 0.816, 0.705, and 0.721 respectively).
Table 17g: Correlations for P-O Value Congruence 4 items

<table>
<thead>
<tr>
<th></th>
<th>PO-21</th>
<th>PO-22</th>
<th>PO-23</th>
<th>PO-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO-21</td>
<td>Pearson Correlation</td>
<td>1.000</td>
<td>0.501**</td>
<td>0.558**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562.000</td>
<td>562</td>
<td>562</td>
</tr>
<tr>
<td>PO-22</td>
<td>Pearson Correlation</td>
<td>0.501**</td>
<td>1.000</td>
<td>0.478**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562</td>
<td>562.000</td>
<td>562</td>
</tr>
<tr>
<td>PO-23</td>
<td>Pearson Correlation</td>
<td>0.558**</td>
<td>0.478**</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562</td>
<td>562</td>
<td>562.000</td>
</tr>
<tr>
<td>PO-24</td>
<td>Pearson Correlation</td>
<td>0.483**</td>
<td>0.387**</td>
<td>0.690**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562</td>
<td>562</td>
<td>562</td>
</tr>
</tbody>
</table>

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

(Source: SPSS analysis of survey data collected for this research)

Table 17h: KMO and Bartlett’s Test for Value Congruence 4 items

<table>
<thead>
<tr>
<th></th>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</th>
<th>Bartlett's Test of Sphericity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.752</td>
<td>Approx. Chi-Square</td>
</tr>
<tr>
<td></td>
<td></td>
<td>df</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sig.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>791.951</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>.000</td>
</tr>
</tbody>
</table>

(Source: SPSS analysis of survey data collected for this research)

Table 17i: Anti-image Matrix for P-O Value Congruence 4 items

<table>
<thead>
<tr>
<th></th>
<th>PO-21</th>
<th>PO-22</th>
<th>PO-23</th>
<th>PO-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-image Covariance</td>
<td>PO-21</td>
<td>.605</td>
<td>-.202</td>
<td>-.136</td>
</tr>
<tr>
<td></td>
<td>PO-22</td>
<td>-.202</td>
<td>.691</td>
<td>-.114</td>
</tr>
</tbody>
</table>
Measures of Sampling Adequacy (MSA)

(Source: SPSS analysis of survey data collected for this research)

Table 17j: Communalities for P-O Congruence 4 items

<table>
<thead>
<tr>
<th></th>
<th>Initial</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO-21</td>
<td>1.000</td>
<td>.630</td>
</tr>
<tr>
<td>PO-22</td>
<td>1.000</td>
<td>.522</td>
</tr>
<tr>
<td>PO-23</td>
<td>1.000</td>
<td>.749</td>
</tr>
<tr>
<td>PO-24</td>
<td>1.000</td>
<td>.655</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis

(Source: SPSS analysis of survey data collected for this research)

The above tests suggest that a factor analysis is appropriate in this case. Table 17k below reveals only one factor needed to be extracted and its eigenvalue was greater than 1 (2.557) so that it is considered to be significant. Notably, this factor accounted for 63.915 percent of the variance, which means a one-factor solution is acceptable. Moreover, the Scree Test (Chart 3) also yields a similar result to the eigenvalue extracted.

Table 17k: Total Variance Explained for P-O Value Congruence 4 items

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>2.557</td>
<td>63.915</td>
</tr>
<tr>
<td>2</td>
<td>.670</td>
<td>16.753</td>
</tr>
</tbody>
</table>
Extraction Method: Principal Component Analysis
(Source: SPSS analysis of survey data collected for this research)

Chart 3: Scree Plot for P-O Value Congruence 4 items

(Source: SPSS analysis of survey data collected for this research)

From the Component Matrix Table 17l below, it can be seen that PO-23 (‘pleasant and agreeable attitudes among co-worker are important’) ranks in the order of the strongest factor loading (0.865) on this factor so that PO-23 can act as a surrogate variable representing the whole group of the ‘P-O Value Congruence Attitude’.

Table 17l: Component Matrix a for P-O Value Congruence 4 items

<table>
<thead>
<tr>
<th>Component</th>
<th>PO-23</th>
<th>PO-24</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PO-23</td>
<td>0.865</td>
<td></td>
</tr>
<tr>
<td>PO-24</td>
<td>0.810</td>
<td></td>
</tr>
</tbody>
</table>
4.5.2.2 Independent Variables (environmentally related factors) and Relationships among them

(1) ‘Belief about the damage due to the Global Financial Tsunami’ (BFT)
(2) Perceptions about ‘Organisational Decline’ (ODC)
(3) Perceptions about ‘Organisational Downsizing’ (ODS)

The independent variables (BFT, ODC, and ODS) are environmentally related factors of the ‘Global Financial Tsunami’ (GFT). These three variables are derived from the GFT. As a matter of fact, huge numbers of people were directly affected and damaged by the GFT, including those who lost money in the financial market and those who lost their jobs owing to organisational decline or organisational downsizing. Of course, some other people were not directly affected by such misfortunes, but their friends and relatives might already have been victims of the crisis so that they would still be aware of the damage due to the GFT. Eventually, they would have felt unsafe and stressed in their workplaces. Therefore, these three independent variables are assumed to influence people’s work attitudes at the time of the GFT.

Table 18B-1 shows the interrelationships among these variables. The relationship between ‘organisational decline’ (ODC) and ‘organisational downsizing’ (ODS) is highly significant and they are highly positively correlated (Pearson’s r=0.613**, p<0.01). Another independent variable ‘belief about the damage due to the Global Financial Tsunami’ (BFT) has the kind of relationship with ODC known to be highly significant and highly correlated (Pearson’s r=0.472**, p<0.01), and with ODS also known to be highly significant and highly correlated (Pearson’s r=0.353**, p<0.01). It is clear that the correlation between ODC and ODS is higher at the level of r=0.613** which implies that both represent the phenomenon of organisational adversity. So, the
variable ODC may be retained and the ODS be reduced. But this scenario can further be explained after the testing of Hypothesis One.

Table 18B-1: Correlations for 3 Environmentally-related Factors

<table>
<thead>
<tr>
<th></th>
<th>BFT</th>
<th>ODC</th>
<th>ODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BFT</td>
<td>Pearson Correlation</td>
<td>1.000</td>
<td>.472**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562.000</td>
<td>562</td>
</tr>
<tr>
<td>ODC</td>
<td>Pearson Correlation</td>
<td>.472**</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562</td>
<td>562.000</td>
</tr>
<tr>
<td>ODS</td>
<td>Pearson Correlation</td>
<td>.353**</td>
<td>.613**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562</td>
<td>562</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
(Source: SPSS analysis of survey data collected for this research)

4.5.2.3 Intervening Variables (other than those of Job Satisfaction and P-O Value Congruence) and Interrelationships

Previously, the researcher has identified six types of work attitudes to parallel with Lankau and Scandura (1996)’s six dimensions of work behaviour. In this section, the analysis will focus on the study of the relationships between the variables under each of the six types of work attitudes. Pearson’s correlation coefficient (r) has been applied to measure whether their relationships are statistically significant. The measuring standard is based on a two-tailed test to define the significance levels of 0.05 or 0.01 in reflecting the confidence level or degree of confidence about the population being investigated.

There are six correlation matrix tables established to measure the variables under each of such work attitude dimensions, as shown below:

I. Job Satisfaction Attitude
   (1) Chances for advancement/promotion (JS-01)
(2) Many achievements in work (JS-02)
(3) My job interest is high (JS-03)
(4) Meaningful work can be attained (JS-04)
(5) Opportunity for personal growth (JS-05)
(6) Recognition for doing a good job (JS-06)
(7) Job esteem is attainable (JS-07)
(8) Opportunity to meet and interact with people (JS-08)
(9) Accept pay-cut instead of layoff (JS-09)
(10) Accept benefit cut if organisational declining (JS-10)
(11) Job security is unaffected by economic downturn (JS-11)
(12) Convenient hours of work to fit personal schedule (JS-12)
(13) Comfortable work conditions attainable (JS-13)

Among these 13 variables under ‘Job Satisfaction Attitude’, most of their interrelationships are significant and positively correlated (69 values are ranging from r=0.132** to r=0.701** with p<0.01, and 2 values of r=0.102* and r=0.104* with p<0.05, see Correlation Matrix Table 16 in sub-section 4.5.2.1).

In contrast to the above, this analysis finds that JS-09 has no significant relationship with JS-01 or with JS-02 or with JS-11 or with JS-13 (Pearson’s r=0.055, r=0.053, r=0.08, and r=-0.43, all with p>0.05). Similarly, it also finds that JS-10 has no significant relationship with JS-01 or with JS-02 or with JS-13 (Pearson’s r=0.05, r=0.052, and r=-0.008, all with p>0.05).

In addition to the results from the said Correlation Matrix Table 16 in sub-section 4.5.2.1, the previous factor analysis concluded that these 13 items have been reduced to only one variable (JS-04) to represent the group of the ‘Job Satisfaction Attitude’.

II. Job Involvement Attitude

(14) Concern about job status—job title, workload & work hours (JI-14)
(15) Endeavor one’s ability and knowledge to work (JI-15)
(16) Try to influence co-workers’ attitudes positively (JI-16)

The above three variables represent ‘Job Involvement Attitude’. The relationships between all three variables are highly significant and highly positively correlated.
(Pearson’s r= 0.419**, 0.373** and 0.698**, p<0.01 see Table 18C-1). Especially, ‘endeavour with ability and knowledge to work’ (JI-15) has maintained a highly significant relationship and highly positive correlation with ‘concerned about job status-title workload and work hours’ (JI-14) at 0.419**, and also has a highly significant relationship and highly positive correlation with ‘influence co-workers to work positively’ (JI-16) at 0.698**. It is noted that both of the above two values are greater than the other value of 0.373**. With the highest strength, this item JI-15 is able to act as a surrogate variable to represent the ‘Job Involvement Attitude’.

Table 18C-1: Correlations for Job Involvement 3 items

<table>
<thead>
<tr>
<th></th>
<th>JI-14</th>
<th>JI-15</th>
<th>JI-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>JI-14</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.419**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.373**</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>562.000</td>
<td>562</td>
</tr>
<tr>
<td></td>
<td></td>
<td>562</td>
<td>562</td>
</tr>
<tr>
<td>JI-15</td>
<td>0.419**</td>
<td>1.000</td>
<td>0.698**</td>
</tr>
<tr>
<td></td>
<td>0.000</td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>562</td>
<td>562.000</td>
<td>562</td>
</tr>
<tr>
<td>JI-16</td>
<td>0.373**</td>
<td>0.698**</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>0.000</td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>562</td>
<td>562</td>
<td>562.000</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
(Source: SPSS analysis of survey data collected for this research)

III. Affective Commitment Attitude

(17) Willing to take additional responsibility (AC-17)

(18) Don’t mind being without assistance from others in the work (AC-18)

There are only two variables (AC-17 and AC-18) reflecting the ‘Affective Commitment Attitude’ (see Table 18C-2). The relationship between them is highly significant and they are highly positively correlated (Pearson’s r=0.614**, p<0.01). Since both represent ‘Affective Commitment Attitude’ and there is a very strong correlation between them; therefore, either could stand for the other. It appears that the variable AC-17 should be the surrogate to represent the ‘Affective Commitment
Attitude’. The implication is that an employee is willing to take additional duties, and of course may not need a helper.

Table 18C-2: Correlations Affective Commitment 2 items

<table>
<thead>
<tr>
<th></th>
<th>AC-17</th>
<th>AC-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC-17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>1.000</td>
<td>.614***</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>562.000</td>
<td>562</td>
</tr>
<tr>
<td>AC-18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.614***</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>562</td>
<td>562.000</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed)
(Source: SPSS analysis of survey data collected for this research)

IV. Continuance Commitment Attitude

(19) Feedback about the results of work (CC-19)
(20) Avoid making errors at work against loss is to the interests of society (CC-20)

There are only two variables (CC-19 and CC-20) to reflect the ‘Continuance Commitment Attitude’ in this construct (see Table 18C-3). The relationship between them is highly significant and highly positively correlated (Pearson’s r=0.589**, p<0.01). Because of their strong correlation, either could stand for the other. The researcher has decided to adopt CC-19 (feedback about work results is important) as the surrogate variable to represent the ‘Continuance Commitment Attitude’.

Table 18C-3: Correlations for Continuance Commitment 2 items

<table>
<thead>
<tr>
<th></th>
<th>CC-19</th>
<th>CC-20</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC-19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>1.000</td>
<td>.589**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>562.000</td>
<td>562</td>
</tr>
<tr>
<td>CC-20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pearson Correlation</td>
<td>.589**</td>
<td>1.000</td>
</tr>
</tbody>
</table>
V. P-O Value Congruence Attitude

(21) Match employee and organisational values (PO-21)
(22) Loyalty to work and influence on co-workers (PO-22)
(23) Pleasant and agreeable attitudes among co-workers (PO-23)
(24) Fair and considerate boss (PO-24)

The above four variables (PO-21, PO-22, PO-23, and PO-24) have been identified to represent the ‘P-O Value Congruence Attitude’. Apparently from Table 17h as shown before (in section 4.5.2 (B), these four variables appeared to be highly correlated so that the relationships between them are also highly statistically significant (Pearson’s $r=0.501^{**}$, $0.558^{**}$, $0.483^{**}$, $0.478^{**}$, $0.387^{**}$, and $0.690^{**}$; and $p<0.01$). And the relationship between ‘pleasant and agreeable attitudes among co-workers (PO-23)’ and ‘fair and considerate boss’ (PO-24) has the highest correlation as well as the highest statistical significance (Pearson’s $r=0.690^{**}$, $p<0.01$). But, based on the results of the factor analysis done previously, the variable PO-23 has been identified as the surrogate to represent the whole group of the ‘P-O Value Congruence Attitude’.

VI. Job Withdrawal Intention Attitude

(25) Tend to leave if workload is heavier than before (JW-25)
(26) Tend to leave if salaries have been cut (JW-26)
(27) Tend to leave if benefits have been cut (JW-27)

‘Job Withdrawal Intention Attitude’ is represented by the above three variables (JW-25, JW-26, and JW-27). Table 18C-4 shows that the relationships between these three variables are highly significant and positively correlated with each other (Pearson’s $r=0.608^{**}$, $0.593^{**}$, and $0.742^{**}$, and $p<0.01$ for all). It is likely that ‘tend to leave if salaries have been cut (JW-26)’ and ‘tend to leave if benefits have been cut (JW-27)’ are talking about the same concept so that their relationship is highly significant and positively correlated (the correlation is quite strong as Pearson’s $r=0.742^{**}$ and $p<0.01$). Moreover, ‘tend to leave if salaries have been cut (JW-26)’ has also
maintained a highly significant relationship and highly positive correlation with ‘tend to leave if workload is heavier than before’ (JW-25). It is apparent that the variable ‘tend to leave if salaries have been cut’ (JW-26) is the strongest in the group. It is also true that salary is closely and directly related to people’s livelihood so that the attitude variable of JW-26 is good enough to act as the surrogate variable representing the group of ‘Job Withdrawal Intention Attitude’.

Table 18C-4: Correlations for Job Withdrawal Intention 3 items

<table>
<thead>
<tr>
<th></th>
<th>JW-25</th>
<th>JW-26</th>
<th>JW-27</th>
</tr>
</thead>
<tbody>
<tr>
<td>JW-25</td>
<td>Pearson Correlation</td>
<td>1.000</td>
<td>.608**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562,000</td>
<td>562</td>
</tr>
<tr>
<td>JW-26</td>
<td>Pearson Correlation</td>
<td>.608**</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562</td>
<td>562,000</td>
</tr>
<tr>
<td>JW-27</td>
<td>Pearson Correlation</td>
<td>.593**</td>
<td>.742**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562</td>
<td>562</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
(Source: SPSS analysis of survey data collected for this research)

In conclusion, after the above factor analyses and correlation studies, the 27 intervening variables have been reduced to only six and each represents one type of the work attitude as shown below:
JS-04 = representing the group of ‘job satisfaction attitude’
JI-15 = representing the group of ‘job involvement attitude’
AC-17 = representing the group of ‘affective commitment attitude’
CC-19 = representing the group of ‘continuance commitment attitude’
PO-23 = representing the group of ‘P-O value congruence attitude’
JW-26 = representing the group of ‘job withdrawal intention attitude’

From the previous factor analyses and correlation studies, one surrogate variable was extracted from each dimension of the work attitude variables. Therefore, a total of six
surrogate variables were extracted from the six dimensions of work attitudes. At this moment, the six surrogate attitudinal variables have to be further reduced through an additional factor analysis before the hypothesis testing process can take place in a later section.

The following is the Correlation Matrix Table 18D-1 of the six surrogate work attitude variables preceding an additional factor analysis to be presented in the next sub-section.

Table 18D-1: Correlations of the Six Surrogate Variables

<table>
<thead>
<tr>
<th></th>
<th>JS-04</th>
<th>JI-15</th>
<th>AC-17</th>
<th>CC-19</th>
<th>PO-23</th>
<th>JW-26</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JS-04 Pearson Correlation</strong></td>
<td>1.000</td>
<td>.270**</td>
<td>.319**</td>
<td>.213**</td>
<td>.115**</td>
<td>-.090*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.066</td>
<td>.032</td>
</tr>
<tr>
<td>N</td>
<td>562.000</td>
<td>562</td>
<td>562</td>
<td>562</td>
<td>562</td>
<td>562</td>
</tr>
<tr>
<td><strong>JI-15 Pearson Correlation</strong></td>
<td>.270**</td>
<td>1.000</td>
<td>.583**</td>
<td>.523**</td>
<td>.475**</td>
<td>-.111**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.009</td>
</tr>
<tr>
<td>N</td>
<td>562</td>
<td>562.000</td>
<td>562</td>
<td>562</td>
<td>562</td>
<td>562</td>
</tr>
<tr>
<td><strong>AC-17 Pearson Correlation</strong></td>
<td>.319**</td>
<td>.583**</td>
<td>1.000</td>
<td>.525**</td>
<td>.376**</td>
<td>-.200**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>562</td>
<td>562</td>
<td>562.000</td>
<td>562</td>
<td>562</td>
<td>562</td>
</tr>
<tr>
<td><strong>CC-19 Pearson Correlation</strong></td>
<td>.213**</td>
<td>.523**</td>
<td>.525**</td>
<td>1.000</td>
<td>.537**</td>
<td>-.090*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.033</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>562</td>
<td>562</td>
<td>562</td>
<td>562.000</td>
<td>562</td>
<td>562</td>
</tr>
<tr>
<td><strong>PO-23 Pearson Correlation</strong></td>
<td>.115**</td>
<td>.475**</td>
<td>.376**</td>
<td>.537**</td>
<td>1.000</td>
<td>-.178**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.006</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>562</td>
<td>562</td>
<td>562</td>
<td>562</td>
<td>562.000</td>
<td>562</td>
</tr>
<tr>
<td><strong>JW-26 Pearson Correlation</strong></td>
<td>-.090*</td>
<td>-.111**</td>
<td>-.200**</td>
<td>-.090*</td>
<td>-.178**</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.032</td>
<td>.009</td>
<td>.000</td>
<td>.033</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>562</td>
<td>562</td>
<td>562</td>
<td>562</td>
<td>562</td>
<td>562.000</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)
(Source: SPSS analysis of survey data collected for this research)
The correlations between the six variables are strong so that their interrelationships are also significant. Five variables JS-04, JI-15, AC-17, CC-19 and PO-23 are positively correlated with one another. But one other variable JW-26 is negatively correlated with the other five (-0.090*, -0.111**, -0.200*, -0.090*, and -0.178**). Since all six variables are highly correlated with each other, it is clear that the situation is possible for a factor analysis.

4.5.2.4 Factor Analysis for the Six (Intervening) Surrogate Variables

In compliance with the usual practice, it is necessary to conduct the following tests in addition to the study of the correlations in Table 18D-1 above before determining the appropriateness of a factor analysis in this case.

Table 18D-2: KMO and Bartlett’s Test for the Six Surrogate Variables

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure of Sampling Adequacy.</th>
<th>.771</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett's Test of Sphericity</td>
<td></td>
</tr>
<tr>
<td>Approx. Chi-Square</td>
<td>805.582</td>
</tr>
<tr>
<td>Df</td>
<td>15.000</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>

(Source: SPSS analysis of survey data collected for this research)

From the above test (Table 18D-2), it is apparent that the overall significance is high at the level of Sig. =0.000 <0.05 and the Measure of Sampling Adequacy (MSA) is at 0.771 which is greater than the required critical level of 0.60. In a sense, this means that a factor analysis is appropriate in this case. Moreover, the following table, Table 18D-3 shows that the Anti-Image Correlations are at a high level above 0.50 (i.e. 0.821, 0.785, 0.762, 0.775, 0.760, and 0.663) implying all of the variables are acceptable for a factor analysis.
Table 18D-3: Anti-image Matrices for the Six Surrogate Variables

<table>
<thead>
<tr>
<th></th>
<th>JS-04</th>
<th>JI-15</th>
<th>AC-17</th>
<th>CC-19</th>
<th>PO-23</th>
<th>JW-26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-image Covariance</td>
<td>JS-04</td>
<td>.883</td>
<td>-.076</td>
<td>-.128</td>
<td>-.032</td>
<td>.048</td>
</tr>
<tr>
<td></td>
<td>JI-15</td>
<td>-.076</td>
<td>.554</td>
<td>-.211</td>
<td>-.105</td>
<td>-.147</td>
</tr>
<tr>
<td></td>
<td>AC-17</td>
<td>-.128</td>
<td>-.211</td>
<td>.558</td>
<td>-.158</td>
<td>-.004</td>
</tr>
<tr>
<td></td>
<td>CC-19</td>
<td>-.032</td>
<td>-.105</td>
<td>-.158</td>
<td>.563</td>
<td>-.222</td>
</tr>
<tr>
<td></td>
<td>PO-23</td>
<td>.048</td>
<td>-.147</td>
<td>-.004</td>
<td>-.222</td>
<td>.644</td>
</tr>
<tr>
<td></td>
<td>JW-26</td>
<td>.035</td>
<td>-.028</td>
<td>.111</td>
<td>-.049</td>
<td>.110</td>
</tr>
</tbody>
</table>

Anti-image Correlation

<table>
<thead>
<tr>
<th></th>
<th>JS-04</th>
<th>JI-15</th>
<th>AC-17</th>
<th>CC-19</th>
<th>PO-23</th>
<th>JW-26</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS-04</td>
<td>.821a</td>
<td>-.109</td>
<td>-.183</td>
<td>-.045</td>
<td>.063</td>
<td>.039</td>
</tr>
<tr>
<td>JI-15</td>
<td>-.109</td>
<td>.785a</td>
<td>-.379</td>
<td>-.189</td>
<td>-.246</td>
<td>-.039</td>
</tr>
<tr>
<td>AC-17</td>
<td>-.183</td>
<td>-.379</td>
<td>.762a</td>
<td>-.282</td>
<td>-.007</td>
<td>.153</td>
</tr>
<tr>
<td>CC-19</td>
<td>-.045</td>
<td>-.189</td>
<td>-.282</td>
<td>.775a</td>
<td>-.369</td>
<td>-.068</td>
</tr>
<tr>
<td>PO-23</td>
<td>.063</td>
<td>-.246</td>
<td>-.007</td>
<td>-.369</td>
<td>.760a</td>
<td>.141</td>
</tr>
<tr>
<td>JW-26</td>
<td>.039</td>
<td>-.039</td>
<td>.153</td>
<td>-.068</td>
<td>.141</td>
<td>.663a</td>
</tr>
</tbody>
</table>

Measures of Sampling Adequacy(MSA)
(Source: SPSS analysis of survey data collected for this research)

In the factor analysis, the larger the communality for a variable the better that variable is explained by the small number of components extracted (Manning & Munro 2007). Hence, the component JI-15 is the one with the largest communality of 0.650 that is most likely to be extracted (Table 18D-4). Note: Below 0.3 is poor.

Table 18D-4: Communalities for the Six Surrogate Variables

<table>
<thead>
<tr>
<th></th>
<th>Initial</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS-04</td>
<td>1.000</td>
<td>.194</td>
</tr>
<tr>
<td>JI-15</td>
<td>1.000</td>
<td>.650</td>
</tr>
<tr>
<td>AC-17</td>
<td>1.000</td>
<td>.635</td>
</tr>
<tr>
<td>CC-19</td>
<td>1.000</td>
<td>.626</td>
</tr>
<tr>
<td>PO-23</td>
<td>1.000</td>
<td>.509</td>
</tr>
<tr>
<td>JW-26</td>
<td>1.000</td>
<td>.082</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis
(Source: SPSS analysis of survey data collected for this research)
The following ‘Total Variance Explained’ Table 18D-5 shows that only one factor has been extracted since only one factor has an eigenvalue greater than 1 (at 2.697), and this factor accounts for 44.944 percent variance of the whole group of six variables.

Table 18D-5: Total Variance Explained for the Six Surrogate Variables

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>2.697</td>
<td>44.944</td>
</tr>
<tr>
<td>2</td>
<td>.966</td>
<td>16.096</td>
</tr>
<tr>
<td>3</td>
<td>.933</td>
<td>15.554</td>
</tr>
<tr>
<td>4</td>
<td>.583</td>
<td>9.717</td>
</tr>
<tr>
<td>5</td>
<td>.456</td>
<td>7.592</td>
</tr>
<tr>
<td>6</td>
<td>.366</td>
<td>6.098</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis
(Source: SPSS analysis of survey data collected for this research)

The Scree Plot (Chart 4) below also indicates the same result, i.e., that one factor is much higher than the others.

Chart 4: Scree Plot for the Six Surrogate Variables

(Source: SPSS analysis of survey data collected for this research)
The final statistics shows that the variable JI-15 ranks the highest (at 0.807) in the order of the values shown in the Component Matrix Table 18D-6 below. In a sense, this variable is able to represent the whole group of six types of surrogate work attitudes. It also acts as the crucial surrogate intervening variable in this research.

Table 18D-6: Component Matrix a for the Six Surrogate Variables

<table>
<thead>
<tr>
<th></th>
<th>Component 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>JI-15</td>
<td>.807</td>
</tr>
<tr>
<td>AC-17</td>
<td>.797</td>
</tr>
<tr>
<td>CC-19</td>
<td>.791</td>
</tr>
<tr>
<td>PO-23</td>
<td>.713</td>
</tr>
<tr>
<td>JS-04</td>
<td>.441</td>
</tr>
<tr>
<td>JW-26</td>
<td></td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis
1 components extracted. JW-26 is below 0.30
(Source: SPSS analysis of survey data collected for this research)

4.5.2.5 Dependent Variables (behavioural factors) and the relationships among them

(1) Job Satisfaction Behaviour
(2) Job Involvement Behaviour
(3) Affective Commitment Behaviour
(4) Continuance Commitment Behaviour
(5) P-O Value Congruence Behaviour
(6) Job Withdrawal Intention Behaviour

The sample of 562 general employees was good enough to tell us about people’s six dimensions of work attitudes in the time of an economic downturn under the shadow of the ‘Global Financial Tsunami’. However, this sample does not show people’s related six dimensions of work behaviours as employees’ self-completed attitudinal questionnaires were not designed for them to evaluate their own behaviours.

According to the attitude theories in the literature review, we are sure that attitudes can determine behaviours. For example, if your attitude was in favour of voting for
Obama to be president, it is mostly likely that your behaviour will be to vote for him. In other words, we may presume that a certain attitude can generate similar behaviour. Hence, the six dimensions of work behaviours are deemed to be dependent variables in this model. At this point, we have to predict employees’ work behaviours based on the work attitude data collected. To describe this operation, selecting one of the six dimensions – “job satisfaction” (JS) can be a good choice. For example, consider its expression below:

\[ \text{JS-01 to JS-13} = (13 \text{ intervening (attitude) variables}) \]
\[ \rightarrow \text{ ‘Job Satisfaction } \text{ Attitude’ predicting ‘Job Satisfaction } \text{ Behaviour’} \]

(In this example, Job Satisfaction Attitude is composed of 13 variables, and theoretically Job Satisfaction Attitude will influence Job Satisfaction Behaviour).

To project and predict the six dimensions of work behaviour, the researcher is relying on the work attitude data from the 562 samples of general employees. A simple statistical method has been applied in the projection process. That is, it is used to calculate the average value of each question on the scale from 1 to 7 answered by all of the 562 respondents so as to get the mean of each question/variable. For example, to generate the mean for ‘Job Satisfaction Behaviour’ it is necessary first to calculate the means of all 13 JS attitude questions/intervening variables (JS-01 to JS-13) from the answers of the 562 respondents. Similarly, the means of the other five dimensions of work behaviour are projected in the same way. So, the following Table 18E-1 displays the means of all six types of work attitudes and they are presumed to be the means of the six dimensions of work behaviours as well.

Table 18E-1: Means of the Six Work Attitude Variables

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS</td>
<td>4.0118</td>
<td>.93274</td>
<td>562</td>
</tr>
<tr>
<td>JI</td>
<td>5.1544</td>
<td>1.12253</td>
<td>562</td>
</tr>
<tr>
<td>AC</td>
<td>4.9004</td>
<td>1.26196</td>
<td>562</td>
</tr>
<tr>
<td>CC</td>
<td>5.2705</td>
<td>1.20448</td>
<td>562</td>
</tr>
</tbody>
</table>
Based on the means of work attitudes shown on the above table, we can proceed to predict employees’ work behaviours, as measured on a seven-point scale, as follows:

(Interpretation of the seven-point scale: 1= strongly disagree (extremely negative), 2= quite disagree (quite negative), 3=slightly disagree (slightly negative), 4=neutral (neither negative nor positive), 5=slightly agree (slightly positive), 6= quite agree (quite positive), and 7=strongly agree (extremely positive). Therefore,

- It is assumed that people’s ‘job satisfaction behaviour’ during the economic downturn in the GFT would be neither negative nor positive as their mean of ‘job satisfaction attitude’ is only at 4.0118 on the seven-point scale.
- It is assumed that people’s ‘job involvement behaviour’ during the economic downturn would be slightly positive as their mean of ‘job involvement attitude’ is 5.1544.
- It is assumed that people’s ‘affective commitment behaviour’ at that time would also be slightly positive at 4.9004.
- It is assumed that people’s ‘continuance commitment behaviour’ at that time would be slightly positive at 5.2705.
- It is assumed that people’s ‘P-O value congruence behaviour’ at that time would be positive at 5.4119.
- It is assumed that people’s ‘job withdrawal intention behaviour’ at that time would be slightly negative at 3.4810.

Having predicted employees’ work behaviours above, it is still necessary to establish whether the projected outcomes are reasonable and reliable. The survey data gathered from the second collection through employers’ and managers’ observations of their employees’ work behaviours would provide a counter-test for using the method of means comparison. Such a test will be done in the section devoted to hypotheses testing. With regard to the interrelationships of the above six dependent variables of work behaviour, Table 18F-1 of the next sub-section will also give a similar explanation.
4.5.2.6: Factor Analysis for the Dependent Variables (Six Dimensions of Work Behaviours)

As six dimensions of work behaviour needed to be examined, the researcher decided to reduce the number of such variables before hypotheses testing at a later stage. The reduction is expected to generate one surrogate dependent variable representing all six dimensions of work behaviour.

Firstly, reviewing the following correlation matrix Table 18F-1 (in which the values were generated from the means of the six types of work attitudes), we note that the correlations among all six variables are strong so that their interrelationships are also highly significant. The five variables JS, JI, AC, CC and PO are positively correlated with one another. But another variable JW is negatively correlated with the other five (-0.135**, -0.121**, -0.214**, -0.164**, and -0.235**). Since all six variables are highly correlated with each other, it is clear that the situation is appropriate for a factor analysis.

Table 18F-1: Correlations for the Six Dimensions of Work Behaviours

<table>
<thead>
<tr>
<th></th>
<th>JS</th>
<th>JI</th>
<th>AC</th>
<th>CC</th>
<th>PO</th>
<th>JW</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS</td>
<td>Pearson Correlation</td>
<td>1.000</td>
<td>.362**</td>
<td>.474**</td>
<td>.394**</td>
<td>.358**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562.000</td>
<td>562</td>
<td>562</td>
<td>562</td>
<td>562</td>
</tr>
<tr>
<td>JI</td>
<td>Pearson Correlation</td>
<td>.362**</td>
<td>1.000</td>
<td>.513**</td>
<td>.627**</td>
<td>.603**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562</td>
<td>562.000</td>
<td>562</td>
<td>562</td>
<td>562</td>
</tr>
<tr>
<td>AC</td>
<td>Pearson Correlation</td>
<td>.474**</td>
<td>.513**</td>
<td>1.000</td>
<td>.588**</td>
<td>.530**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562</td>
<td>562</td>
<td>562.000</td>
<td>562</td>
<td>562</td>
</tr>
<tr>
<td>CC</td>
<td>Pearson Correlation</td>
<td>.394**</td>
<td>.627**</td>
<td>.588**</td>
<td>1.000</td>
<td>.719**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562</td>
<td>562</td>
<td>562</td>
<td>562.000</td>
<td>562</td>
</tr>
<tr>
<td>PO</td>
<td>Pearson Correlation</td>
<td>.358**</td>
<td>.603**</td>
<td>.530**</td>
<td>.719**</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>
Factor Analysis of Employees' Six Work Behaviours in Progress

With reference to the KMO and Bartlett’s test below, it is apparent that the overall significance is high at the level of Sig. =0.000 <0.05 and the Measure of Sampling Adequacy (MSA) is at 0.832 (Table 18F-2) which is greater than the required critical level of 0.60. This means that a factor analysis is appropriate in this case.

Table 18F-2: KMO and Bartlett’s Test for the Six Dimensions of Work Behaviours

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .832 |
| Bartlett's Test of Sphericity | Approx. Chi-Square |
| | 1212.198 |
| df | 15.000 |
| Sig. | .000 |

Meanwhile, the following Table 18F-3 Anti-Image Correlations are well above 0.50 (i.e. 0.871, 0.874, 0.858, 0.796, 0.805, and 0.798), thereby implying that all of variables are acceptable for a factor analysis.

Table 18F-3: Anti-image Matrices for the Six Dimensions of Work Behaviours

<table>
<thead>
<tr>
<th>Anti-image Covariance</th>
<th>JS</th>
<th>JI</th>
<th>AC</th>
<th>CC</th>
<th>PO</th>
<th>JW</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS</td>
<td>.747</td>
<td>-.052</td>
<td>-.185</td>
<td>-.039</td>
<td>-.018</td>
<td>.023</td>
</tr>
<tr>
<td>JI</td>
<td>-.052</td>
<td>.534</td>
<td>-.086</td>
<td>-.122</td>
<td>-.119</td>
<td>-.036</td>
</tr>
<tr>
<td>AC</td>
<td>-.185</td>
<td>-.086</td>
<td>.549</td>
<td>-.115</td>
<td>-.047</td>
<td>.080</td>
</tr>
<tr>
<td>CC</td>
<td>-.039</td>
<td>-.122</td>
<td>-.115</td>
<td>.389</td>
<td>-.195</td>
<td>-.021</td>
</tr>
<tr>
<td>PO</td>
<td>-.018</td>
<td>-.119</td>
<td>-.047</td>
<td>-.195</td>
<td>.426</td>
<td>.096</td>
</tr>
<tr>
<td>JW</td>
<td>.023</td>
<td>-.036</td>
<td>.080</td>
<td>-.021</td>
<td>.096</td>
<td>.929</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Anti-image Correlation</th>
<th>JS</th>
<th>JI</th>
<th>AC</th>
<th>CC</th>
<th>PO</th>
<th>JW</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS</td>
<td>.871*</td>
<td>-.083</td>
<td>-.289</td>
<td>-.072</td>
<td>-.033</td>
<td>.027</td>
</tr>
</tbody>
</table>
Measures of Sampling Adequacy (MSA)
(Source: SPSS analysis of survey data collected for this research)

In the factor analysis, the larger the communality for a variable the better that variable is explained by the small number of components extracted, and below 0.3 is not acceptable. Hence, the component CC is the one with the largest communality of 0.735 (see Table 18F-4) that is the one most likely to be extracted.

Table 18F-4: Communalities for the Six Dimensions of Work Behaviours

<table>
<thead>
<tr>
<th></th>
<th>Initial</th>
<th>Extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS</td>
<td>1.000</td>
<td>.383</td>
</tr>
<tr>
<td>JI</td>
<td>1.000</td>
<td>.624</td>
</tr>
<tr>
<td>AC</td>
<td>1.000</td>
<td>.626</td>
</tr>
<tr>
<td>CC</td>
<td>1.000</td>
<td>.735</td>
</tr>
<tr>
<td>PO</td>
<td>1.000</td>
<td>.697</td>
</tr>
<tr>
<td>JW</td>
<td>1.000</td>
<td>.100</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis
(Source: SPSS analysis of survey data collected for this research)

The following ‘Total Variance Explained’ Table 18F-5 shows that only one factor has been extracted since only one factor has an eigenvalue greater than 1 (at 3.165), and this factor accounts for 52.757% variance of the whole group of six variables.

Table 18F-5: Total Variance Explained for the Six Dimensions of Work Behaviours

<table>
<thead>
<tr>
<th>Component</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>3.165</td>
<td>52.757</td>
</tr>
<tr>
<td>2</td>
<td>.944</td>
<td>15.728</td>
</tr>
</tbody>
</table>
Extraction Method: Principal Component Analysis
(Source: SPSS analysis of survey data collected for this research)

The Scree Plot (Chart 5) below also indicates a similar result that one factor’s strength is much higher than the others.

Chart 5: Scree Plot for the Six Dimensions of Work Behaviours

(Source: SPSS analysis of survey data collected for this research)

The final statistics shows that the variable CC ranks the highest (at 0.858) in the order of the values shown in the Component Matrix Table 18F-7 below. This variable is able to represent the whole group of the six dimensions of work behaviour. In other words, it can act as the surrogate dependent variable in this research.
Table 18F-6: Component Matrix for the Six Dimensions of Work Behaviours

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>CC</td>
<td>.858</td>
</tr>
<tr>
<td>PO</td>
<td>.835</td>
</tr>
<tr>
<td>AC</td>
<td>.791</td>
</tr>
<tr>
<td>JI</td>
<td>.790</td>
</tr>
<tr>
<td>JS</td>
<td>.619</td>
</tr>
<tr>
<td>JW</td>
<td>-.316</td>
</tr>
</tbody>
</table>
4.5.2.7 A Summary Conclusion of the Data Reduction Process (Selection of Surrogate Variables)

With the exception of the independent variables, data reductions have been applied to both the intervening variables and the dependent variables in this research. Since there were initially as many as 27 intervening variables, it was necessary to perform two reductions in order to reduce the factors of the whole group into only one surrogate variable (JI-15) representing the work attitudes of employees. The six dependent variables have also been reduced to one surrogate variable (CC) representing the work behaviours of the general work force in the same manner. In this data reduction process, factor analysis was used to reduce a group or a sub-group of four or more variables into the minimum or one. Except for the groups or sub-groups of less than four variables, correlation analysis instead of factor analysis has been adopted to do the reductions. Only the variable of the highest strength/loading was chosen as the surrogate variable under either method. For example, the factor analysis reduced the sub-group of (JS-01 to JS-13) from 13 items to one surrogate variable (JS-04), and the sub-group of (PO-21 to PO-24) from four items to one surrogate variable (PO-23); but the correlation analyses have reduced the sub-groups of (JI-14 to JI-16) from three items to one surrogate variable (JI-15), for (AC-17 to AC-18) from two items to one surrogate variable (AC-17), also (CC-19 to CC-20) from two items to one surrogate variable (CC-19), and finally (JW-25 to JW-27) from three items to one surrogate variable (JW-26). In the second data reduction of the above six surrogate variables, the item (JI-15) turns out to be the crucial surrogate intervening variable in the factor analysis. With regard to the six work behaviours mentioned above, the factor analysis has been used to reduce the work behavioural group to one surrogate variable (CC) in the end. See Figure 30 below:
Figure 30: Data Reduction Process

(Source: SPSS analysis of survey data collected for this research)

4.5.3 Relationships between Independent and Intervening Variables

The three independent variables are environmentally related factors that existed during the period of the GFT. But twenty-four of the intervening variable items (JS01 to PO-24) are borrowed from Elizur (1984) and three (JW-25 to JW-27) are specifically developed, making up the total of 27 intervening variables also known as work attitude objects (a kind of work situation or work condition) to trigger the employees’ 27 work attitudes in this survey (see Figure 31 below). There is a direct relationship between the environmentally related factors and employees’ work attitudes, and the former are determinants that affect the latter according to the literature review.

Figure 31: Relationships between Independent and Intervening Variables

(3 GFT environmentally related factors)  (6 Work attitudes triggered by 27 objects)  (6 dimensions of work behaviours)

(Source: SPSS analysis of survey data collected for this research)
4.5.4 Relationships between Intervening and Dependent Variables

The 27 intervening variables are grouped under six dimensions of work attitude, and these work attitudes are presumed to influence the related six dimensions of work behaviour (see Figure 32). These 27 intervening work variables are initially encountered and reflected by 27 work situations or work conditions, also known as work attitude objects. Unless they face these kinds of work attitude objects, employees cannot form related work attitudes. According to the literature review, attitudes are able to predict related behaviours; therefore, it is logical to believe that employees’ positive work attitudes would inevitably generate positive work behaviours, and negative work attitudes would generate negative work behaviours, but with the exception of the connection between job satisfaction and job withdrawal intention.

Figure 32: Relationships between Intervening and Dependent Variables

(Source: SPSS analysis of survey data collected for this research)

4.5.5 Relationships between Independent and Dependent Variables

It is not likely that environmentally related factors (independent variables) will have a direct relationship with behaviours (dependent variables). The reason is quite simple as employees would firstly form certain attitudes when having encountered certain attitude objects before actualising certain related behaviours. For example, in the winter time you may firstly form an attitude about people having a warm coat in the cold street so that you will also put on your overcoat before going out. In other words, the relationship between the environmentally related factors (independent variables)
and employees’ work behaviours (dependent variables) is assumed to be mediated by work attitudes (intervening variables). Please see Figure 33 below:

Figure 33: Relationships between Independent and Dependent Variables

Independent variables
(1) Belief about the damage due to the GFT
(2) Organizational Decline
(3) Organizational Downsizing

Intervening variables
27 Attitude Objects: 6 Dimensions of Work Attitudes
JS-01 to JS-13: Job Satisfaction Attitude
JI-14 to JI-16: Job Involvement Attitude
AC-17 to AC-18: Affective Commitment Attitude
CC-19 to CC-20: Continuance Commitment Attitude
PO-21 to PO-24: P-O Value Congruence Attitude
JW-25 to JW-27: Job Withdrawal Attitude

Dependent variables
6 Dimensions of Work Behaviors
Job Satisfaction Behavior
Job Involvement Behavior
Affective Commitment Behavior
Continuance Commitment Behavior
P-O Value Congruence Behavior
Job Withdrawal Behavior

(Source: SPSS analysis of survey data collected for this research)

Figure 34: Comparison between Work Attitudes’ Sample 1 and Sample 2 (Samples-Paralleling Method)

Sample 1: n=562 employees

Independent variables
(1) Belief about the damage due to the GFT (BFT)
(2) Organisational Decline (ODC)
(3) Organisational Downsizing (ODS)

Intervening variables
27 Attitude Objects: 6 Dimensions of Work Attitudes
JS-01 to JS-13: Job Satisfaction Attitude
JI-14 to JI-16: Job Involvement Attitude
AC-17 to AC-18: Affective Commitment Attitude
CC-19 to CC-20: Continuance Commitment Attitude
PO-21 to PO-24: P-O Value Congruence Attitude
JW-25 to JW-27: Job Withdrawal Attitude

Dependent variables
6 Dimensions of Work Behaviors
Job Satisfaction Behavior
Job Involvement Behavior
Affective Commitment Behavior
Continuance Commitment Behavior
P-O Value Congruence Behavior
Job Withdrawal Behavior

Sample 2: n=36 employers observing/evaluating about 3,000 employees

Independent variables
(1) Belief about damage due to the GFT (BFT)
(2) Organizational Decline (ODC)
(3) Organizational Downsizing (ODS)

Intervening variables
27 Attitude Objects: 6 Dimensions of Work Attitudes
JS-01 to JS-13: Job Satisfaction Attitude
JI-14 to JI-16: Job Involvement Attitude
AC-17 to AC-18: Affective Commitment Attitude
CC-19 to CC-20: Continuance Commitment Attitude
PO-21 to PO-24: P-O Value Congruence Attitude
JW-25 to JW-27: Job Withdrawal Attitude

Dependent variables
6 Dimensions of Work Behaviors
Job Satisfaction Behavior
Job Involvement Behavior
Affective Commitment Behavior
Continuance Commitment Behavior
P-O Value Congruence Behavior
Job Withdrawal Behavior

(Source: SPSS analysis of survey data collected for this research)
The final objects of study of both Sample 1 and Sample 2 are general employees from various businesses in Hong Kong (see Figure 34). In a mainly services-oriented economy, the characteristics of these employees are generally similar. Hence, it is logical to assume that the results generated in both models will also be similar. Furthermore, the same set of measuring instrument (27 items) used to test both samples could easily make the necessary comparisons. For inferential statistical analysis, the use of the above ‘Samples-Paralleling Method’ is a good choice in this research.

As mentioned in the literature review chapter, attitude theories tell us that attitudes are able to predict behaviours. So, in the case of 562 participants, it is likely that employees’ six dimensions of work attitudes can influence their six-related work behaviours. However, only the work attitude data in the first data collection for Sample 1 is available. It is not known exactly to what degree the employees’ work attitudes could affect their work behaviours. It is not possible for employees to evaluate objectively their own behaviours. In addition, it was not possible to access 562 relevant employers to evaluate these 562 employees. Therefore, the second data collection is an alternative way to evaluate the behaviours of employees. Because evaluation is conducted by 36 employers/ managers/ supervisors using the similar instrument (questionnaire of 27 measuring items) to observe their employees’ work behaviours during the GFT, it is apparent that the results would be more objectively reflective of the true work behaviours of employees in general at that time. Of course, an examination of work behaviours between the above two samples is required in the following section.

4.6 Comparing the Assessment of Employees’ Work Behaviours in Sample 1 and Sample 2.

ANOVA and Paired-Samples Test have been adopted as follows:
ANOVA and Paired-Samples t-test between the projected employees’ work behaviours of n=562, and the surveyed employees’ work behaviours of n=36. Please refer to the following Tables 19H-1, 19H-2 and 19H-3:
Table 19H-1: Means Comparison between 2 sets of Samples: Descriptive Statistic

<table>
<thead>
<tr>
<th>Sample</th>
<th>n</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS</td>
<td>562</td>
<td>4.0118</td>
<td>.93274</td>
<td>.870</td>
</tr>
<tr>
<td>JI</td>
<td>562</td>
<td>5.1544</td>
<td>1.12253</td>
<td>1.260</td>
</tr>
<tr>
<td>AC</td>
<td>562</td>
<td>4.9004</td>
<td>1.26196</td>
<td>1.593</td>
</tr>
<tr>
<td>CC</td>
<td>562</td>
<td>5.2705</td>
<td>1.20448</td>
<td>1.451</td>
</tr>
<tr>
<td>PO</td>
<td>562</td>
<td>5.4119</td>
<td>1.05117</td>
<td>1.105</td>
</tr>
<tr>
<td>JW</td>
<td>562</td>
<td>3.4810</td>
<td>1.27460</td>
<td>1.625</td>
</tr>
<tr>
<td>JS-Beha</td>
<td>36</td>
<td>4.5128</td>
<td>.69204</td>
<td>.479</td>
</tr>
<tr>
<td>JI-Beha</td>
<td>36</td>
<td>4.8233</td>
<td>.79915</td>
<td>.639</td>
</tr>
<tr>
<td>AC-Beha</td>
<td>36</td>
<td>4.9861</td>
<td>.93722</td>
<td>.878</td>
</tr>
<tr>
<td>CC-Beha</td>
<td>36</td>
<td>5.3889</td>
<td>.92668</td>
<td>.859</td>
</tr>
<tr>
<td>PO-Beha</td>
<td>36</td>
<td>5.9028</td>
<td>.82652</td>
<td>.683</td>
</tr>
<tr>
<td>JW-Beha</td>
<td>36</td>
<td>3.7867</td>
<td>1.38513</td>
<td>1.919</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>36</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: SPSS analysis of survey data collected for this research)

Table 19H-2: Paired-Samples Test

<table>
<thead>
<tr>
<th>Pair No.</th>
<th>Sample-1 (n=562)</th>
<th>Sample-2 (n=36)</th>
<th>Difference</th>
<th>Sample-1 Variance</th>
<th>Sample-2 Variance</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>JS</td>
<td>JS-Beha</td>
<td>0.501</td>
<td>0.870</td>
<td>0.479</td>
<td>0.391</td>
</tr>
<tr>
<td>Pair 2</td>
<td>JI</td>
<td>JI-Beha</td>
<td>0.331</td>
<td>1.260</td>
<td>0.639</td>
<td>0.621</td>
</tr>
<tr>
<td>Pair 3</td>
<td>AC</td>
<td>AC-Beha</td>
<td>0.086</td>
<td>1.593</td>
<td>0.878</td>
<td>0.715</td>
</tr>
<tr>
<td>Pair 4</td>
<td>CC</td>
<td>CC-Beha</td>
<td>0.118</td>
<td>1.451</td>
<td>0.859</td>
<td>0.592</td>
</tr>
<tr>
<td>Pair 5</td>
<td>PO</td>
<td>PO-Beha</td>
<td>0.491</td>
<td>1.105</td>
<td>0.683</td>
<td>0.422</td>
</tr>
<tr>
<td>Pair 6</td>
<td>JW</td>
<td>JW-Beha</td>
<td>0.306</td>
<td>1.625</td>
<td>1.919</td>
<td>0.294</td>
</tr>
<tr>
<td>Average</td>
<td></td>
<td></td>
<td>0.3055</td>
<td>0.506</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: SPSS analysis of survey data collected for this research)

Note: Data on the SPSS Spreadsheet:

On the SPSS spreadsheet, each case is exactly each horizontal row to record each respondent’s data regarding the values of all answers marked on the questionnaire.
Each case’s mean of JS = Sum of each case’s (JS-01 to JS-13)/13
The above Mean of JS = Sum of each case’s mean of JS divided by 562 cases
=4.0118

Each case’s mean of JI = Sum of each case’s (JI-14 to JI-16)/3
The above Mean of JI = Sum of each case’s mean of JI divided by 562 cases
=5.1544

Each case’s mean of AC = Sum of each case’s (AC-17 to AC-18)/2
The above Mean of AC = Sum of each case’s mean of AC divided by 562 cases
=4.9004

Each case’s mean of CC = Sum of each case’s (CC-19 to CC-20)/2
The above Mean of CC = Sum of each case’s mean of CC divided by 562 cases
=5.2705

Each case’s mean of PO = Sum of each case’s (PO-21 to PO-24)/4
The above Mean of PO = Sum of each case’s mean of PO divided by 562 cases
=5.4119

Each case’s mean of JW = Sum of each case’s (JW-25 to JW-27)/3
The above Mean of JW = Sum of each case’s mean of JW divided by 562 cases
=3.4810

Similarly,
Each case’s mean of JS-Beha = Sum of each case’s (JS-Beha-01 to JS-Beha-13)/13
The above Mean of JS-Beha = Sum of each case’s mean of JS-Beha divided by 36 cases = 4.5128

The means of JI-Beha = 4.8233, AC-Beha = 4.9861, CC-Beha = 5.3889, PO-Beha = 5.9028, and JW-Beha = 3.7867 are calculated with the same pattern as above. The means of the above tables were generated using the statistical software package SPSS 16.0.
4.6.1 Testing Assumption of Equivalent Variance: F-max

The results from the above table are explained by judging the variances. Comparing whether the variances of two sets of samples are roughly equal is to calculate the ratio of the larger variance to the smaller one in each pair. This index, according to Manning and Munro (2007), is referred to as F-max. If the larger variance is more than three times that of the smaller, it can be concluded that the homogeneity of the variance assumption has been violated. In the above table, for pair 1, the ratio of the larger variance of Sample-1 (0.870) divided by the smaller variance of Sample-2 (0.479) is 1.8163. Given this value (F-max) is less than the critical value of 3, it is therefore assumed that the homogeneity of variance assumption has not been violated.

The other five pairs of 1.260/0.639=1.9718, 1.593/0.878=1.8144, 1.451/0.859=1.6892, 1.105/0.683=1.6179, and 1.919/1.625=1.1809 having the values of (F-max) are less than the critical value of 3. Therefore, it can be concluded that both sets of samples are roughly equal.

It is also noted that the average difference of all variances is 0.506 while the average difference of all means is 0.3055 implying that the values of both sets of samples are very similar. Likewise, on a seven-point scale, the difference of 0.3055 less than half of a point is of no big problem for reflecting the equivalent results. In conclusion, the six projected dimensions of work behaviours in the first sample (n=562) can match the surveyed results of the six dimensions of work behaviours of the second sample (n=36).

Table 19H-3: Statistical Analysis of Worker Attitudes and Employers’ Observations of Work Behaviour
Based on the above trends, it is further noted that the projected Employees’ Work Behaviours from n=562 are very similar to the surveyed Employees’ Work Behaviours from n=36.

Chart 6: Comparison of Means from 2 Sets of Samples

4.7 Testing the Hypotheses

Hypothesis formation was introduced in Section 2.8 of Chapter Two. This section will deal with the testing and result-finding process. Having conducted factor analyses and correlation studies in Section 4.5, the researcher identified the following surrogate variables for hypothesis testing:

A. Independent (3) variables – 1. ‘belief about the damage due to the global financial tsunami (BFT)’, 2. ‘organisational decline (ODC)’, and 3.
‘organisational downsizing (ODS)’. No ‘data reduction’ was needed for these independent variables so there is no surrogate variable.


C. Dependent (6) variables – ‘JS’, ‘JI’, ‘AC’, ‘CC’, ‘PO’ and ‘JW’. After data reduction, CC has been identified as the surrogate variable for employees’ work behaviours.

The statistical software SPSS 16.0 was used to carry out the hypotheses tests in this project. Multiple regression analysis was applied for testing Hypothesis 1, Pearson’s correlation for Hypothesis 2, Partial correlation analysis for Hypothesis 3, and correlation analysis for both Hypotheses 4 and 5.

4.7.1 Testing Hypothesis One with Multiple Regression Analysis.

**Hypothesis 1 (H1):** Environmentally related factors did not influence employees’ work attitudes.

Because there are three environmentally related factors (independent variables) in this study, three sub-hypotheses were defined:

**H1a:** Belief about the damage due to the global financial tsunami did not influence employees’ work attitudes.

**H1b:** Organisational decline during the global financial tsunami did not influence employees’ work attitudes.

**H1c:** Organisational downsizing during the global financial tsunami did not influence employees’ work attitudes.

The regression equation applied to test the relationships between the environmentally related factors and employees’ work attitudes is expressed as:

\[ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon \]

Where; \( Y \) = Dependent Variable = Employees’ Work Attitudes (JI-15)
\( X_1 \) = Independent Variable = Belief about the damages of the GFT (BFT)
\( X_2 \) = Independent Variable = Organisational Decline under GFT (ODC)
\( X_3 \) = Independent Variable = Organisational Downsizing under GFT (ODS)
\( \beta_1, \beta_2, \beta_3 = \text{Regression coefficient for each independent variable} \)

\[ \varepsilon = \text{Random error} \]

Before conducting regression analysis, it is advisable to use Pearson’s correlation table to observe the relationships among the above variables.

**H1**

Table 20I-1: Correlations for Hypothesis 1

<table>
<thead>
<tr>
<th></th>
<th>JI-15</th>
<th>BFT</th>
<th>ODC</th>
<th>ODS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>JI-15 Pearson Correlation</strong></td>
<td>1.000</td>
<td>.153**</td>
<td>.106*</td>
<td>.042</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.000</td>
<td>.012</td>
<td>.325</td>
</tr>
<tr>
<td>N</td>
<td>562.000</td>
<td>562</td>
<td>562</td>
<td>562</td>
</tr>
<tr>
<td><strong>BFT Pearson Correlation</strong></td>
<td>.153**</td>
<td>1.000</td>
<td>.472**</td>
<td>.353**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>562</td>
<td>562.000</td>
<td>562</td>
<td>562</td>
</tr>
<tr>
<td><strong>ODC Pearson Correlation</strong></td>
<td>.106*</td>
<td>.472**</td>
<td>1.000</td>
<td>.613**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.012</td>
<td>.000</td>
<td></td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>562</td>
<td>562</td>
<td>562.000</td>
<td>562</td>
</tr>
<tr>
<td><strong>ODS Pearson Correlation</strong></td>
<td>.042</td>
<td>.353**</td>
<td>.613**</td>
<td>1.000</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.325</td>
<td>.000</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>562</td>
<td>562</td>
<td>562</td>
<td>562.000</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

(Source: SPSS analysis of survey data collected for this research)

The above correlation Table 20I-1 shows that employees’ work attitude (JI-15) has significant relationships \((r=0.153**, p<0.01)\) with belief about the damage due to the global financial tsunami (BFT), and \((r=0.106*, p<0.05)\) with organisational decline (ODC), but \((r=0.04, p>0.05)\) has no significant relationship with organisational downsizing (ODS). There are highly and positively significant associations \((r=0.472**, 0.353**, 0.613**, p<0.01)\) between all three environmentally related factors/ independent variables (BFT, ODC, and ODS), but these associations are not strong enough to reach the situation of multicollinearity (very high correlations, i.e.,
0.9). In other words, these three environmentally related variables altogether are not talking about the same thing so that a multiple regression analysis is appropriate for all of the above variables.

The following tables report the results of the multiple regression analysis. Table 20I-2, which presents the regression model summary, has explained 2.1% (adjusted R square) of the variance in the dependent variable (the ANOVA Table 20I-3 shows that F=5.054, the F statistic is significant as p=0.002<0.05 and the multiple correlation coefficient R= 0.163 is significantly different from zero) so that the overall multiple correlation coefficient is significant and this indicates that the combination of the predictors significantly predict the dependent variable (JI-15). From this regression model, the results also show the normal distribution of the dependent variable (JI-15) which is the crucial surrogate variable representing employees’ work attitudes (see Chart 7). Meanwhile, the test for normality has confirmed normality and this is shown in the Normal Probability Plot of Regression (Chart 8).

Multiple Linear Regression (MLR) for BFT, ODC, ODS and JI-15

Table 20I-2 Model Summary for BFT, ODC, ODS and JI-15

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.163a</td>
<td>0.026</td>
<td>0.021</td>
<td>1.36448</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), ODS, BFT, ODC
b. Dependent Variable: JI-15

Table 20I-3: ANOVA for BFT, ODC, ODS and JI-15

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>28.227</td>
<td>3</td>
<td>9.409</td>
<td>5.054</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>1038.891</td>
<td>558</td>
<td>1.862</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1067.117</td>
<td>561</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), ODC, BFT, ODC
Table 20I-2 Model Summary for BFT, ODC, ODS and JI-15

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.163*</td>
<td>.026</td>
<td>.021</td>
<td>1.36448</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), ODS, BFT, ODC  
b. Dependent Variable: JI-15  
(Source: SPSS analysis of survey data collected for this research)

Table 20I-4: Coefficients for BFT, ODC and JI-15

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardised Coefficients</th>
<th>Standardised Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>4.726</td>
<td>.232</td>
<td>20.398</td>
<td>.000</td>
</tr>
<tr>
<td>BFT</td>
<td>.123</td>
<td>.043</td>
<td>.137</td>
<td>2.877</td>
</tr>
<tr>
<td>ODC</td>
<td>.065</td>
<td>.050</td>
<td>.072</td>
<td>1.280</td>
</tr>
<tr>
<td>ODS</td>
<td>-.047</td>
<td>.049</td>
<td>-.051</td>
<td>-.959</td>
</tr>
</tbody>
</table>

a. Dependent Variable: JI-15  
(Source: SPSS analysis of survey data collected for this research)

The above Table 20I-4 regarding the un-standardised coefficients’ beta for ‘belief about the damage due to the global financial tsunami’ (BFT) is positive and significant (B=0.123, p=0.004<0.01), and the correlations for Hypothesis One in Table 20I-1 also shows a positive correlation of significance at r=0.153**, p<0.01 between JI-15 and BFT. This implies that there is a significant association between (BFT) and employees’ work attitudes (JI-15). Hence, Hypothesis 1a (H1a) is rejected.
In other words, ‘belief about the damage due to the global financial tsunami’ did influence employees’ work attitudes.
Meanwhile, the un-standardised coefficients’ beta for organisational decline (ODC) is positive and significant as $B=0.065$, and Table 201-1 has shown a correlation of significance at $r=0.106^*$, $p=0.012<0.05$ between ODC and JI-15 (A Simple Linear Regression has generated the same result). This means there is an association between organisational decline (ODC) and employees’ work attitudes (JI-15), and this relationship is regarded as significant. Therefore, Hypothesis 1b (H1b) is also rejected. In other words, ‘organisational decline’ is a determining factor influencing employees’ work attitudes.

Finally, the un-standardised coefficients’ beta for organisational downsizing (ODS) is negative and not significant ($B=-0.047$, $p=0.338>0.05$), and Table 20I-1 shows no significant correlation between ODS and JI-15 (as $r=0.042$, $p=0.325>0.05$). This implies that there is no significant association between organisational downsizing (ODS) and employees’ work attitudes (JI-15). Thus, Hypothesis 1c (H1c) is accepted. Therefore, ‘organisational downsizing’ did not influence employees’ work attitudes.

Chart 7: Histogram of JI-15

(Source: SPSS analysis of survey data collected for this research)
Chart 8: Normal P-P Plot of JI-15

![Normal P-P Plot of Regression Standardized Residual](image)

(Source: SPSS analysis of survey data collected for this research)

**Conclusion for Hypothesis One (H1)**

Hypothesis One is composed of three sub-hypotheses, these being H1a, H1b and H1c. The results of Hypothesis One show that two environmentally related factors did influence employees’ work attitudes in the time of an economic downturn under the shadow of the ‘Global Financial Tsunami’. These two factors are the independent variables: ‘belief about the damages of the global financial tsunami’ (BFT) and ‘organisational decline’ (ODC). However, ‘organisational downsizing’ (ODS) is not a determinant that can influence ‘employees’ work attitudes’ (JI-15). Therefore, sub-hypotheses H1a and H1b are rejected, but H1c is accepted.

**4.7.2 Testing Hypothesis Two with Pearson’s Correlation Matrix**

Hypothesis 2 (H2): Employees’ work attitudes had no influence on their work behaviours.

**H2**

Correlation—(JI-15) and (CC)
Table 20J-1: Correlations between Employees’ Work Attitudes and Work Behaviours

<table>
<thead>
<tr>
<th></th>
<th>JI-15</th>
<th>CC</th>
</tr>
</thead>
<tbody>
<tr>
<td>JI-15</td>
<td>Pearson Correlation</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562.000</td>
</tr>
<tr>
<td>CC</td>
<td>Pearson Correlation</td>
<td>.596**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562</td>
</tr>
</tbody>
</table>

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

(Source: SPSS analysis of survey data collected for this research)

The above correlation Table 20J-1 shows that there is a statistically significant relationship between employees’ work attitudes (JI-15) and their work behaviours (CC) and there is a positive correlation between these two variables (r=0.596** with p<0.01). This implies that (JI-15), being the surrogate variable of work attitudes, is able to influence (CC) being the surrogate variable of work behaviours. Therefore, it is clear that Hypothesis Two should be rejected. In other words, employees’ work attitudes can influence their related work behaviours.

**Conclusion for Hypothesis Two (H2)**

The above finding that work attitudes (JI-15) can influence work behaviours (CC) is consistent with the basic ‘attitude theories’ in the literature review chapter. Since Hypothesis Two is rejected, employees’ work attitudes are proven to have impacts on their related work behaviours.

4.7.3 Testing Hypothesis Three with Partial Correlations Analysis

H3

Hypothesis 3 (H3): The relationship between environmentally related factors and employees’ work behaviours is not mediated by employees’ work attitudes.
Since there are three independent variables in this study, three sub-hypotheses were defined:

H3a: The relationship between belief about the damage due to the global financial tsunami and employees’ work behaviours is not mediated by employees’ work attitudes.

H3b: The relationship between organizational decline and employees’ work behaviours is not mediated by employees’ work attitudes.

H3c: The relationship between organizational downsizing and employees’ work behaviours is not mediated by employees’ work attitudes.

The purpose of using partial correlation coefficient analysis is to examine the relationships among the independent variables, the intervening variable, and the dependent variable. In the test for Hypothesis 3, the aim is to compare the effects of the intervening variable (JI-15) on the relationship between the independent variable (three environmentally related factors) and the dependent variable (CC). A partial correlation coefficient is therefore used to remove the association that work attitudes have with both environmentally related factors (BFT, ODC, ODS) and work behaviours (CC). In this research, JI-15 is the surrogate variable representing employees’ work attitudes (also known as an intervening variable) and CC is the surrogate variable representing employees’ work behaviours. The associations among these three groups of variables will be explained in the following tests.
Hypothesis (H3a)

Table 20K-1: Partial Correlation for BFT, JI-15, CC Correlations

<table>
<thead>
<tr>
<th>Control Variables</th>
<th>BFT</th>
<th>CC</th>
<th>JI-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>-none-²</td>
<td>Correlation</td>
<td>1.000</td>
<td>.108</td>
</tr>
<tr>
<td></td>
<td>Significance (2-tailed)</td>
<td></td>
<td>.010</td>
</tr>
<tr>
<td></td>
<td>df</td>
<td>560</td>
<td>560</td>
</tr>
<tr>
<td>CC</td>
<td>Correlation</td>
<td>.108</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Significance (2-tailed)</td>
<td>.010</td>
<td></td>
</tr>
<tr>
<td></td>
<td>df</td>
<td>560</td>
<td>0</td>
</tr>
<tr>
<td>JI-15</td>
<td>Correlation</td>
<td>.153</td>
<td>.596</td>
</tr>
<tr>
<td></td>
<td>Significance (2-tailed)</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>df</td>
<td>560</td>
<td>560</td>
</tr>
</tbody>
</table>

Cells contain zero-order (Pearson) correlations.

(Source: SPSS analysis of survey data collected for this research)

In this construct, BFT is the independent variable representing the ‘belief about the damage owing to the global financial tsunami’, JI-15 is the surrogate variable for work attitudes and CC is the surrogate variable for work behaviours.

The partial correlation in Table 20K-1 above explicitly shows strong correlations as well as significant relationships among all three variables BFT, JI-15, and CC (r=0.153**, 0.108**, 0.596**, and all p<0.05). But when the relationship between BFT and CC is controlled for the linear effects of JI-15, it shows the partial correlation coefficient between BFT and CC to be r=0.021 with p=0.614>0.05 as JI-15 is controlled and held constant. This means that in the absence of work attitude, the relationship between the ‘belief about the damage due to the global financial tsunami’ and employees’ work behaviour becomes insignificant. In other words, employees’
work attitudes (JI-15) is an intervening variable between the environmental factor (BFT) and work behaviour (CC). Therefore, H3a is rejected. That is, the relationship between belief about the damage due to the global financial tsunami and employees’ work behaviour is mediated by employees’ work attitudes.

Hypothesis (H3b)

Table 20K-2: Partial Correlation for ODC, JI-15, CC Correlations

<table>
<thead>
<tr>
<th>Control Variables</th>
<th>CC</th>
<th>ODC</th>
<th>JI-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>-none-#</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC</td>
<td>1.000</td>
<td>.088</td>
<td>.596</td>
</tr>
<tr>
<td>Correlation</td>
<td>.</td>
<td>.038</td>
<td>.000</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>.</td>
<td>.038</td>
<td>.000</td>
</tr>
<tr>
<td>Df</td>
<td>0</td>
<td>560</td>
<td>560</td>
</tr>
<tr>
<td>ODC</td>
<td>.088</td>
<td>1.000</td>
<td>.106</td>
</tr>
<tr>
<td>Correlation</td>
<td>.</td>
<td>.038</td>
<td>.012</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>.</td>
<td>.038</td>
<td>.012</td>
</tr>
<tr>
<td>Df</td>
<td>560</td>
<td>0</td>
<td>560</td>
</tr>
<tr>
<td>JI-15</td>
<td>.596</td>
<td>.106</td>
<td>1.000</td>
</tr>
<tr>
<td>Correlation</td>
<td>.</td>
<td>.031</td>
<td></td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>.</td>
<td>.031</td>
<td></td>
</tr>
<tr>
<td>Df</td>
<td>560</td>
<td>560</td>
<td>0</td>
</tr>
<tr>
<td>JI-15</td>
<td>1.000</td>
<td>.031</td>
<td></td>
</tr>
<tr>
<td>CC</td>
<td>.</td>
<td>.464</td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.</td>
<td>.464</td>
<td></td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>.</td>
<td>.464</td>
<td></td>
</tr>
<tr>
<td>Df</td>
<td>0</td>
<td>559</td>
<td>0</td>
</tr>
<tr>
<td>ODC</td>
<td>.031</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Correlation</td>
<td>.</td>
<td>.464</td>
<td></td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>.</td>
<td>.464</td>
<td></td>
</tr>
<tr>
<td>Df</td>
<td>559</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Cells contain zero-order (Pearson) correlations.

(Source: SPSS analysis of survey data collected for this research)

In this construct, ODC is the independent variable representing organisational decline, JI-15 is the surrogate variable for work attitudes and CC is the surrogate variable for work behaviours. With reference to the above partial correlation Table 20K-2, it is clear that there are interrelationships among those three types of variables. In particular the correlation between JI-15 and CC is strong and statistically significant ($r=0.596^{**}$ with $p<0.01$). However, when the relationship between ODC and CC is controlled for the linear effects of JI-15, a partial correlation coefficient between ODC
and CC is revealed with $r=0.031$ with $p=0.464>0.05$ as JI-15 is controlled and held constant. This means that, in the absence of work attitude, the relationship between organisational decline and employees’ work behaviour becomes insignificant. In other words, employees’ work attitudes (JI-15) is an intervening variable between the environmental factor (ODC) and work behaviour (CC). Therefore, H3b is also rejected. That is, the relationship between organisational decline and employees’ work behaviours is mediated by employees’ work attitudes.

Hypothesis (H3c)

Table 20K-3: Partial Correlation for ODS, JI-15, CC Correlations

<table>
<thead>
<tr>
<th>Control Variables</th>
<th>CC</th>
<th>ODS</th>
<th>JI-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>-none-<em>a</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC</td>
<td>1.000</td>
<td>0.052</td>
<td>0.596</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>.</td>
<td>0.218</td>
<td>0.000</td>
</tr>
<tr>
<td>Df</td>
<td>0</td>
<td>560</td>
<td>560</td>
</tr>
<tr>
<td>ODS</td>
<td>0.052</td>
<td>1.000</td>
<td>0.042</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>0.218</td>
<td>.</td>
<td>0.325</td>
</tr>
<tr>
<td>Df</td>
<td>560</td>
<td>0</td>
<td>560</td>
</tr>
<tr>
<td>JI-15</td>
<td>0.596</td>
<td>0.042</td>
<td>1.000</td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>0.000</td>
<td>0.325</td>
<td>.</td>
</tr>
<tr>
<td>Df</td>
<td>560</td>
<td>560</td>
<td>0</td>
</tr>
<tr>
<td>JI-15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CC</td>
<td>1.000</td>
<td>0.034</td>
<td></td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>.</td>
<td>0.422</td>
<td></td>
</tr>
<tr>
<td>Df</td>
<td>0</td>
<td>559</td>
<td></td>
</tr>
<tr>
<td>ODS</td>
<td>0.034</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>Significance (2-tailed)</td>
<td>0.422</td>
<td>.</td>
<td></td>
</tr>
<tr>
<td>Df</td>
<td>559</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Cells contain zero-order (Pearson) correlations.

In this construct, ODS is the independent variable representing organisational downsizing, JI-15 is the surrogate variable for work attitudes and CC is the surrogate variable for work behaviours. Looking at the partial correlations in Table 20K-3, it is easy to see that there is no significant relationship between ODS and CC as $r=0.052$ and $p=0.218>0.05$. There is also no significant association between ODS and JI-15.
(r=0.042 and p=0.325>0.05) although the correlation between JI-15 and CC is positive and significant (r=0.596**, p<0.01). In the absence of work attitudes, the relationship between organisational downsizing (ODS) and employees’ work behaviour (CC) is also insignificant (r=0.034 and p=0.422>0.05). This implies that the presence or absence of work attitudes makes no significant difference to the relationship between (ODS) and (CC). In other words, employees’ work attitude (JI-15) is not an intervening variable between the environmental factor (ODS) and work behaviour (CC). Therefore, H3c is accepted; that is, the relationship between organisational downsizing and employees’ work behaviours is not mediated by employees’ work attitudes.

**Conclusion for Hypothesis Three (H3)**

Hypothesis Three has three sub-hypotheses: H3a, H3b and H3c. The above findings show that the relationship between ‘belief about the damage due to the global financial tsunami’ (BFT) and employees’ work behaviours (CC) is mediated by employees’ work attitudes (JI-15). Similarly, the relationship between ‘organisational decline (ODC)’ and employees’ work behaviours (CC) is also mediated by employees’ work attitudes (JI-15). However, employees’ work attitudes have no significant influence on the relationship between ‘organisational downsizing (ODS) and employees’ work behaviours (CC). Therefore, H3a and H3b are rejected but H3c is accepted.
Figure 35: Research Findings: Relationships among Variables

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Intervening Variable</th>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Decline</td>
<td>Employees’ work attitude</td>
<td>Employees’ work behavior</td>
</tr>
<tr>
<td>Belief about the damages of the global financial tsunami</td>
<td></td>
<td></td>
</tr>
<tr>
<td>r=0.553**</td>
<td>r=0.472**</td>
<td>r=0.153**</td>
</tr>
<tr>
<td>Organizational Downsizing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>r=0.613**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>β=0.123 p&lt;0.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>r=0.596** p&lt;0.01</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Developed for this research)

The above diagram (Figure 35) shows the relationships among environmentally related factors, employees’ work attitudes, and employees’ work behaviours.

4.7.4 Testing Hypothesis Four with Correlation Analysis

H4

Hypothesis 4 (H4): There is no relationship between the attitudinal variables of Job Satisfaction and Job Withdrawal Intention during an Economic Downturn in the time of the Global Financial Tsunami.
Table 20L-1: Correlation between JS-04 and JW-26

<table>
<thead>
<tr>
<th></th>
<th>JS-04</th>
<th>JW-26</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS-04</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.032</td>
</tr>
<tr>
<td></td>
<td>Sum of Squares and Cross-products</td>
<td>1386.996</td>
</tr>
<tr>
<td></td>
<td>Covariance</td>
<td>2.472</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562</td>
</tr>
<tr>
<td>JW-26</td>
<td>Pearson Correlation</td>
<td>-0.090*</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.032</td>
</tr>
<tr>
<td></td>
<td>Sum of Squares and Cross-products</td>
<td>-120.075</td>
</tr>
<tr>
<td></td>
<td>Covariance</td>
<td>-.214</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562</td>
</tr>
</tbody>
</table>

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

(Source: SPSS analysis of survey data collected for this research)

JS-04 is the surrogate variable representing job satisfaction and it is inherently a positive measure. JW-26 is the surrogate variable representing job withdrawal intention and it is inherently a negative measure. If the same rating is used for both variables on a seven-point scale, the results will reflect opposite attitudes. For example, the rating of 2 for job satisfaction reflects a negative attitude purporting low job satisfaction, but the same rating for job withdrawal intention reflects a positive attitude of a very low intention to leave or agreeing to stay in the organisation. The above Table 20L-1 displays a significant but seemingly negative correlation ($r= -0.090^*, p=0.032<0.05$) between JS-4 and JW-26. In a sense, H4 is rejected. It implies that there is a significant (but not necessarily negative correlation even with a minus sign) relationship between job satisfaction and job withdrawal intention during an economic downturn in the time of the global financial tsunami.
Conclusion for Hypothesis Four (H4)

The findings show a significant relationship between job satisfaction (JS-04) and job withdrawal intention (JW-26) so that H4 is rejected. Since one variable (JS-04) is of a positive nature and the other variable (JW-26) is of a negative nature, the negative $r$ may imply a positive meaning about low or no withdrawal intention. In other words, low job satisfaction does not necessarily result in high withdrawal intention during an economic recession.

4.7.5 Testing Hypothesis Five with Correlation Analysis

H5

Hypothesis 5 (H5): There is no relationship between Affective Commitment and P-O Value Congruence during an Economic Downturn in the time of the Global Financial Tsunami

Table 20M-1: Correlation between AC-17 and PO-23

<table>
<thead>
<tr>
<th></th>
<th>AC-17</th>
<th>PO-23</th>
</tr>
</thead>
<tbody>
<tr>
<td>AC-17</td>
<td>Pearson Correlation</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sum of Squares and Cross-products</td>
<td>1057.651</td>
</tr>
<tr>
<td></td>
<td>Covariance</td>
<td>1.885</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562</td>
</tr>
<tr>
<td>PO-23</td>
<td>Pearson Correlation</td>
<td>.376**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Sum of Squares and Cross-products</td>
<td>371.712</td>
</tr>
<tr>
<td></td>
<td>Covariance</td>
<td>.663</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>562</td>
</tr>
</tbody>
</table>

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

(Source: SPSS analysis of survey data collected for this research)

Accordingly, AC-17 is a surrogate variable representing affective commitment, and PO-23 is a surrogate variable representing personal and organisational value.
congruence. The above Table 20M-1 shows a strongly positive and significant 
\( r=0.376^{**}, p=0.000<0.01 \) relationship between these two variables. In other words, 
the higher the degree of employees’ affective commitment, the higher the degree of 
personal and organisational value congruence in the organisation. In the same sense, 
there is a strongly significant association between them. Hence, H5 is also rejected. 
This implies that there is a positive and significant relationship between affective 
commitment attitude (AC-17) and P-O value congruence attitude (PO-23) in the 
organisation during an economic downturn in the time of the GFT.

**Conclusion for Hypothesis Five (H5)**

The findings show a positive and significant relationship between affective 
commitment attitude and P-O value congruence attitude so that H5 is also rejected.

**4.8 Summary of the Chapter**

Having applied a number of appropriate research methods and relevant analytical 
tools with the support of the software SPSS 16.0, the researcher conducted a series of 
descriptive and inferential analyses to obtain the results of the overall study. 
Beginning with a situational analysis and followed by a detailed study of the profile 
and characteristics of the samples, the researcher conducted systematic examinations 
of the relationships between one variable and the other, and the interrelationships 
between all relevant variables as well. The five hypotheses have been tested step by 
step and the outcomes have revealed the facts about general employees’ work 
attitudes in the time of the global financial tsunami. The two-sample comparison 
confirms the correctness of the assumption that the inclination of people’s work 
behaviours is similar to their related work attitudes. Although these results basically 
match the researcher’s assumptions, the finding that one of the three key 
environmentally related factors ‘organisational downsizing (ODS)’ does not have an 
impact on employees’ work attitudes, is far beyond the expectations of the researcher.

In short, the findings tell us that only two environmentally related factors can 
influence employees’ work attitudes and they are ‘belief about the damage due to the
global financial tsunami’ (BFT) and ‘organisational decline’ (ODC), and the affected work attitudes in turn can influence work behaviours. In other words, work attitudes act as mediators between the above two environmentally related factors and employees’ work behaviours. Moreover, with the exception of the relationship between job satisfaction (JS) and job withdrawal intention (JW), similar degrees of negativity or positivity in people’s other work attitudes would generate similar degrees of negativity or positivity in people’s relative work behaviours during the GFT.

Since this chapter is already comparatively longer than any other chapter in this thesis, and to avoid confusion, certain additional findings and interpretations derived from triangulation methods will be presented in the following chapter.
CHAPTER 5
CONCLUSION AND IMPLICATIONS

5.1 Introduction

5.1.1 Chapter Objective and Chapter Structure
The objective of this chapter is to reiterate briefly the background and flow of the research. Thus, it will revisit the conceptual model, its foundation theories and methodologies, thus leading to statistical analysis and findings for drawing conclusions and discussing the implications of the thesis. The researcher will also explain and address the limitations of this research project and make recommendation for future studies.

This chapter has 10 sections. Section 5.1 constitutes a brief introduction covering objective and background of the research. Section 5.2 outlines the results and conclusions of the five research hypotheses. Section 5.3 presents the overall work attitudes of the 562 employees during the GFT and provides a visual representation of the measurement of the six dimensions of people’s work attitudes for that particular time period. Section 5.4 reveals other findings from the expressions of respondents through open-ended questions. Section 5.5 relates certain findings from a number of HR professional symposia to justify the results of this research. Section 5.6 exposes the implications regarding the study to various parties, and Section 5.7 states the contributions of the project to knowledge and to society. Section 5.8 describes the research limitations and Section 5.9 makes recommendations for future research. Finally, Section 5.10 concludes with a summary of this chapter. The structure of Chapter 5 is represented in Figure 39.
Figure 36: Structure of Chapter 5

5.1 Introduction
   5.1.1 Chapter objectives and structure

5.2 Conclusions from the research hypotheses and outcomes

5.3 Overall work attitudes of Respondents during the GFT

5.4 Other findings of the study

5.5 Results for employees’ work behaviours in an economic downturn reflected by HR practitioners

5.6 Implications for various Parties under the GFT

5.7 Contribution to knowledge and society

5.8 Limitation of the research

5.9 Recommendation for future research

5.10 Conclusion
5.2 Conclusions from Research Hypotheses and Outcomes

With the support of the abovementioned analytical tools, the five tests of the hypotheses have resulted in the following outcomes.

**Conclusion for Hypothesis One (H1)**

The finding for Hypothesis One is different from the model that assumed that all three environmentally related factors were independent variables that could influence employees’ work attitudes. The results show that only two environmentally related factors significantly influenced employees’ work attitudes during the economic downturn under the shadow of the GFT. These factors are ‘belief about the damage due to the global financial tsunami’ (BFT) and ‘organisational decline’ (ODC) so that these two are considered determinants that can influence ‘employees’ work attitudes’ (JI-15). In contrast to BFT and ODC, the third factor “organisational downsizing” (ODS) was proven to be not a real determinant that can influence employees’ work attitudes since the finding was that it did not have a significant relationship with employees’ work attitudes. Organisational downsizing is a proactive management strategy so it might happen at any time and is not restricted to a poor or a good economic environment. To interpret the factor of ODS, it is quite logical to hold that surviving employees in a downsizing organisation may not necessarily be influenced by such an adverse global situation immediately as they are still keeping their jobs for the time being. Unless they feel highly insecure and believe that the damage caused by the global financial tsunami will fall on them soon, their work attitudes otherwise would not be affected at that time. So, it is reasonable that ‘belief about the damage due to the global financial tsunami’ (BFT) and ‘organisational decline’ (ODC) would have more influence on employees than ‘organisational downsizing’ (ODS). After testing all three sub-hypotheses (H1a, H1b and H1c), the results show that only the sub-hypothesis H1c is accepted. Therefore, it can be concluded that, among the above three selected factors, only the factor of organisational downsizing (ODS) was not a real determinant of employees’ work attitudes (JI-15) in the time of the global financial tsunami.
**Conclusion for Hypothesis Two (H2)**

The finding that ‘employees’ work attitudes’ (JI-15) can influence ‘employees’ work behaviours’ (CC) is consistent with basic attitude theories in the literature review chapter. Since there is a significant correlation between them, a positive work attitude would generate a positive work behaviour except for the relationship between job satisfaction and job withdrawal intention. For example, when employees form a positive work attitude toward ‘P-O value congruence’, they would behave with positive ‘personal and organisational value congruence’ in their workplace. It is very true in this case that employees have a strong willingness to cooperate and share the same values with their organisations in times of economic adversity. This finding is also relevant to the outcome of the paired-samples t-test as shown in Section 4.6 of the preceding chapter. In short, employees’ work attitudes (JI-15) have been proven to be a true determinant of employees’ work behaviours (CC) during the GFT.

**Conclusion for Hypothesis Three (H3)**

The findings show that the relationship between the ‘belief about the damage due to the global financial tsunami’ (BFT) and ‘employees’ work behaviours’ (CC) is mediated by ‘employees’ work attitudes’ (JI-15). To some degree, the relationship between ‘organisational decline’ (ODC) and ‘employees’ work behaviours’ (CC) is also mediated by ‘employees’ work attitudes’ (JI-15). But the relationship between ‘organisational downsizing’ (ODS) and ‘employees’ work behaviours’ (CC) is not mediated by ‘employees’ work attitudes’ (JI-15). Because the findings explicitly show that ‘employees’ work attitudes’ (JI-15) had no strong association between ‘organisational downsizing’ (ODS) and ‘employees’ work behaviours’ (CC). However, organisational decline means diminishing revenues as well as shrinking market shares, and this may produce negative effects on employees’ work attitudes and in turn on employees’ work behaviours. Therefore, the result for Hypothesis Three (H3) is that two sub-hypotheses were rejected (H3a and H3b) and one (H3c) was accepted.

**Conclusion for Hypothesis Four (H4)**

The findings show a significant relationship between ‘job satisfaction’ (JS-04) and ‘job withdrawal intention’ (JW-26) so H4 is rejected. On the surface, there may appear to be a negative relationship between these two variables but actually there is
not. Since one variable is of a positive nature and the other variable is of a negative nature, the negative ‘r’ may not necessarily imply a truly negative relationship. That is, employees usually have no or low job withdrawal intention (negative work attitude), even though their job satisfaction (positive work attitude) is low in poor economic conditions because fewer job opportunities are available. So, employees will tend to keep their jobs and try not to leave their organisation at that time. Such scenarios were described by several personnel practitioners in the HR seminars in 2009 and they are further discussed in section 5.5. Therefore, this finding is in contrast to the common rule advocated by many theorists that the lower the employees’ job satisfaction, the higher their job withdrawal intention will be.

**Conclusion for Hypothesis Five (H5)**
The findings show a positive and significant relationship between ‘affective commitment’ (AC-17) and ‘P-O value congruence’ (PO-23) so H5 is also rejected. In other words, employees are willing to share the common values with their organisation, basing on personal affection to meet the organisational expectation for a higher degree of commitment to the job when their organisation is suffering from hardship during adverse economic conditions. It is possible that many other organisations are also encountering problems at the same time so that people have fewer opportunities to change jobs. Under such conditions, existing employees usually want to show more affection and loyalty by committing themselves to attaining the goals of the organisation for mutual survival in a poor business environment.

**5.3 Overall Work Attitudes of Respondents during the GFT**

Besides the conclusions to the above five hypotheses, the following conclusion will provide readers with a general view of the common work attitudes of employees in Hong Kong during the economic downturn of the GFT. Again, using the frame of Lankau and Scandura’s (1996) six dimensions of work attitudes, the researcher has averaged the values of related variables for each of the six types of work attitudes to conduct analyses and come up with the following conclusion (see Table 21 and Chart 9).
Table 21: The Overall Means of each of the Six Dimensions of Employees’ Work Attitudes

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>JS</td>
<td>4.0118</td>
<td>.93274</td>
<td>562</td>
</tr>
<tr>
<td>JI</td>
<td>5.1544</td>
<td>1.12253</td>
<td>562</td>
</tr>
<tr>
<td>AC</td>
<td>4.9004</td>
<td>1.26196</td>
<td>562</td>
</tr>
<tr>
<td>CC</td>
<td>5.2705</td>
<td>1.20448</td>
<td>562</td>
</tr>
<tr>
<td>PO</td>
<td>5.4119</td>
<td>1.05117</td>
<td>562</td>
</tr>
<tr>
<td>JW</td>
<td>3.4810</td>
<td>1.27460</td>
<td>562</td>
</tr>
</tbody>
</table>

Chart 9: Six Dimensions of Employees’ Work Attitudes

(Source: Analysis of survey data collected for this research)

The above chart is based on the averaged means of each of the six groups of work attitude variables representing the surveyed answers of the 562 general employees in Hong Kong.
Figure 37: Visual expressions showing the degree of negative or positive work attitudes

The above Figure 37 display the six dimensions of employees’ work attitudes (JS=job satisfaction, JI=job involvement, AC=affective commitment, CC=continuance commitment, PO=personal & organisational congruence, and JW=job withdrawal intention). The upper triangles depict positive work attitudes, and the lower triangles depict negative work attitudes. The wider lines show strongly positive or strongly negative work attitudes, and the narrower lines show slightly positive or slightly negative work attitudes. On the left, the values of -3, 0, and +3 represent the special measuring scale, and on the right, the values of 1, 4, and 7 represent the regular measuring scale. The six values of figures on the bottom are the research findings related to each of the six double-triangular shapes, which visually show the degree/level of general employees’ work attitudes during the economic downturn.

[The above seven-point scale can be interpreted as from 1 to 7:  
1=Strongly negative, 2=Quite negative, 3=Slightly negative. 4=Neutral, 5=Slightly positive. 6=Quite positive, 7=Strongly positive. ]

**Interpretations of the above Six Dimensions of Employees’ Work Attitudes**

With reference to the surveyed results measured on a regular seven-point scale:

- Employees’ job satisfaction attitudes are neutral at 4.0118; that is, neither positive nor negative. In other words, job satisfaction is not the major
consideration of employees in an adverse situation during an economic downturn.

- Employees’ job involvement attitudes are mildly higher than *slightly positive* at 5.1544. The main reason is that employees want to get involved in their jobs positively to a certain extent.

- Employees’ affective commitment attitudes are mildly lower than *slightly positive* at 4.9004. This is because employees still want to show a certain degree of affection and loyalty to their organisation when it is encountering adversity.

- Employees’ attitudes regarding continuance commitment are a little higher than *slightly positive* at 5.2705. Most employees are probably still worried about layoffs. Continuance commitment means they want to keep their jobs continuously.

- Employees’ P-O value congruence attitudes are *quite positive* at 5.4119. That is, employees understand that cooperation and sharing the same values and goals with their organisations is important when they are experiencing a difficult business situation in an economic downturn.

- Employees’ job withdrawal intention attitudes are *slightly negative* at 3.4810. Employees have low or no intention to leave their organisation when fewer job opportunities are available outside their organisations during an economic downturn.

With reference to the paired-sample test in section 4.5, this result is a good reason to believe that people’s work behaviours are similar to the results of the above chart.

### 5.4 Other Findings of the Study

Having reported the above facts, the following are from informants’ responses to the open-ended question: “What other impacts of the economic downturn (in the time of the global financial tsunami) are affecting your work status?”

Since open-ended questions are answered freely by respondents, they can express whatever ideas and opinions they want so that there is no control over their use of
words and sentences. In this respect, it is impossible for the researcher to conduct a completely error-free statistical analysis. Of the 562 respondents, only 137 persons gave their answers to the open-ended question. Having repeatedly read all the answers, the researcher tried to minimise errors by using key words to interpret respondents’ answers. For example:

- The answer from the 28th respondent: “Mood is absolutely a factor affecting work. People worry about economic downturn that could affect job security and job status, in turn affecting family’s living conditions.” The meanings of this answer imply three key expressions, ‘bad mood’, ‘stress and pressure’, and ‘job insecurity’ during the economic downturn.
- The answer from the 61st respondent: “If the company closes down, I would lose my job.” The meaning of this answer mainly implies the key word ‘job insecurity’.
- The answer from the 114th respondent: “Workload has been increased while salary remains unchanged.” The meaning of this answer mainly implies the key word ‘heavier workload’.
- The answer from the 122nd respondent: “Company cuts manpower but assigns additional workload on the remaining employees.” The meanings of this answer imply two key words ‘layoff’ and ‘heavier workload’.
- The answer from the 250th respondent: “Company budget-cut results in benefits-cut (cut medical coverage and even annual dinner).” The meaning of this answer mainly implies the key word ‘benefits-cut’.

Apart from the above five randomly picked examples, the other answers to this open-ended question are also mainly expressions about negative perspectives toward the economic downturn in the time of the global financial tsunami. The researcher has identified the following key words that can properly interpret most expressions of the 137 respondents who answered the above open-ended question: (1) ‘stress and pressure’, (2) ‘fewer job opportunities’, (3) ‘heavier workload’ (4) ‘longer working hours’, (5) ‘bad mood’, (6) ‘layoffs’, (7) ‘job insecurity’, (8) salary-cut’, (9) benefits-cut’, (10) ‘poor prospects’, and (11) ‘low morale’.
Table 22: Key Words used to Interpret Answers to Open-ended Questions

<table>
<thead>
<tr>
<th>Key Words</th>
<th>No. of Times Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Stress &amp; pressure</td>
<td>11</td>
</tr>
<tr>
<td>(2) Fewer job opportunities</td>
<td>7</td>
</tr>
<tr>
<td>(3) Heavier workload</td>
<td>23</td>
</tr>
<tr>
<td>(4) Longer working hours</td>
<td>12</td>
</tr>
<tr>
<td>(5) Bad mood</td>
<td>10</td>
</tr>
<tr>
<td>(6) Layoffs</td>
<td>8</td>
</tr>
<tr>
<td>(7) Job insecurity</td>
<td>8</td>
</tr>
<tr>
<td>(8) Salary-cut</td>
<td>14</td>
</tr>
<tr>
<td>(9) Benefits-cut</td>
<td>6</td>
</tr>
<tr>
<td>(10) Poor prospects</td>
<td>7</td>
</tr>
<tr>
<td>(11) Low morale</td>
<td>15</td>
</tr>
<tr>
<td>Total:</td>
<td>121</td>
</tr>
</tbody>
</table>

The answers to the open-ended question from the other respondents cannot be interpreted properly by the above eleven key words.
(Source: Analysis of survey data collected for this research)

The above Table 22 shows the number of appearances of the key words in the respondents’ answers to the open-ended question. These key words may represent the general work attitudes of the great majority of the 137 respondents who have answered the open-ended question. A few of those who answered reported “no effect on them” or just talked about “the drop of sales” or other unrelated matters in their organisations.
It is understandable that these 11 work situations/conditions were commonly felt by the 137 employees. Heavier workload was frequently experienced by most of them in the time of the global financial tsunami (see Figure 38). On account of organisational decline, many companies and business entities had cut budgets and manpower resulting in heavier workloads for the remaining employees. With regard to the other 10 work conditions, the researcher does not make further interpretations as the above frequency table has already clearly depicted the scenario.

5.5 Results for Employees’ Work Behaviours in an Economic Downturn Reflected by HR Practitioners

In addition to the previous conclusions from the analyses of the data of the 562 participants, a triangulation approach has also been applied which was first mentioned in section 3.1.2. The purpose of triangulation is to combine information from multiple sources for in-depth study (Landy & Conte 2007).
The following information from seminars and meetings is mainly discussions about various issues of employer-employee relationships, especially regarding the period of the adverse economic conditions in the midst of the GFT. Since these are topics are related to some issues pertaining to employees’ work attitudes or work behaviours in about the same time frame as the GFT, the observations in these seminars and meetings can therefore logically form a small part of the entire research study.

Topics of Seminar and Meeting:
(1) The ‘Employer-Employee-Family Friendly Congruence Seminar’ organised by the Labour Department on 11 September 2009.
(2) The ‘Work-Life Balance Day’ organised by the Community Business Organisation and co-sponsored by the Labour Department on 23 October 2009.
(3) The ‘Joint-Meeting of the Human Resources Manager’ held by the Workplace Consultation Promotion Division of the Labour Department on 7 September 2010.

In the above events, a number of participating HR professionals discussed “employee-attitudes-behaviours under an adverse economic situation in the midst of the global financial tsunami” and gave their observations about their employees’ work attitudes and work behaviours during this period. The researcher has selectively classified their findings and observations that were relevant to the following six dimensions:

(1) Job Satisfaction
- Generally, employees’ job satisfaction was low on account of increasing workloads resulting from organisational restructuring and cuts to manpower.
- Pay cuts and benefits cuts caused low job satisfaction among all levels of employees.
- Low job satisfaction resulted from the stress due to the layoffs of co-workers and worries about being laid off at a later stage.
- The lack of job security resulted in negative attitudes among employees and in turn caused low job satisfaction in the workplace.

(2) Job Involvement
- As job opportunities diminished, employees had positive attitudes towards their job involvement; that is, towards job status, workload and work hours. Positive considerations meant employees did not mind heavy workloads and long working
hours during the economic downturn. This was not related to low job satisfaction but was closely linked to the importance of having a job in the worsening economic environment.

(3) Affective Commitment
- No employees wanted to see the decline of an organisation where they had worked for quite some time so they committed themselves affectively and worked harder and took on additional tasks as well as more responsibilities in order to keep their organisation alive during the period of adverse conditions.

(4) Continuance Commitment
- Most employees wanted continuance commitment, which implies that they were concerned about feedback and more result-oriented goals in their jobs. In other words, they expected to continue to commit to their work in the organisation during an unstable economic period. This also implied that employees wanted to remain in their organisations because they have no other job opportunity elsewhere.

(5) P-O Value Congruence
- During times of adversity, employees generally wanted to align their own interests with those of their organisations. So, if their organisation could survive the difficult times, they could retain their jobs and basic benefits. At that time, personal and organisational values were congruent. Hence, employees would give more loyalty to the organisation so as to help it survive in the worsening business environment resulted from the global financial crisis.
- Positive employee work behaviours were a definite consequence of ‘personal and organisational value congruence’. At the time of adversity, many organisations emphasised ‘work life balance’ by encouraging employees to face reality and think positively about their present job status and meeting the current needs of the organisation; for example, the positive view that temporary sufferings from heavy workloads and long working hours should not be regarded as permanent.
- Positive employee work behaviours would also result from organisation’s guidance and timely counselling to their employees about both personal and organisational adaptations to adverse environments in the hope of restoring employees’ morale and confidences in the workplace.
- Positive employee work behaviours were usually evidenced as a result of better channels of communications between the employees and the organisation.

(6) Job Withdrawal Intention
- When an economic downturn happened, employees were not able to find a job easily elsewhere owing to fewer job opportunities, so they wanted to keep their existing jobs. In other words, their job withdrawal intentions became very low. Therefore, under an economic recession, most of the employees had no or low intention to withdraw from their jobs even if their job satisfaction was low because of heavier workloads and pay cuts, as well as benefits cut for the time being.

The above points were observations of employees’ behaviours brought out by many HR managers in the above seminars and meetings. These HR professionals had already made certain observations of their employees’ behaviours during an economic downturn, for example, in the time of the GFT. Besides the above, the most important findings in these meetings were:

(1) Adverse economic environments could affect employees’ attitudes (depressed moods) and could in turn influence employees’ behaviours under the above six dimensions.

(2) Employees’ work behaviours in an economic recession were different from those of a normal or booming economic situation. For example, job satisfaction was no longer a good determinant of job withdrawal intention. In a poor and declining economic environment, employees would rather work harder, with longer working hours with less job satisfaction in order to keep their existing jobs.

(3) Generally, the belief that job satisfaction is always negatively correlated with intention to leave was supported by many business academics. That is, the lower the employees’ job satisfaction, the higher the likelihood they would want to leave the organisation. But, according to the behavioural observations of employees reflected by HR managers in the above meetings, this theoretical cognition was not necessarily appropriate during the GFT.
5.6 Implications for Various Parties under the Shadow of the Global Financial Tsunami

Through the integration of the analysed results of the survey and the literature review together with HR professionals’ observations and additional information from a number of respondents, the researcher has realised that this study of work attitudes during the GFT also provides a better understanding the overall situations of various working groups (ages, gender, and job levels) at that time.

(1) Age Groups: Generally speaking, older employees are usually the first target for sacrifice under layoff action taken by declining or downsizing organisations (Armstrong-Stassen & Schlosser, 2008). Because many of those older employees have already moved to a higher salary range and they might be regarded as less productive than younger employees, and so the management of the declining organisations may adopt a policy of ‘forcing early retirement’ (Armstrong-Stassen & Schlosser 2008) as a downsizing strategy to deal with their older employees especially unprofessional or less skillful ones. Mowday et al. (1979) contend that more tenured employees are less likely to leave voluntarily than younger employees. Owing to the fear of being laid off, older employees are willing to work harder and longer hours in the hope of retaining their existing jobs. In other words, older employees tend to take upon themselves bigger job commitments.

(2) Gender: In Chinese culture, males are traditionally the dominant members of a family and also the main financial source of the family as well. According to Li et al. (2008), women’s traditional social roles may lead to their lower job involvement than men and their double-role workload may also cause lower job involvement in their organisations. Chinese people are very concerned about mianzi (face). Hence, maintaining face is regarded as a matter of personal esteem and esteem from others (Selmer & Littrell 2004). To many male family members, unemployment not only means no income but also no face. Hence, job security is more important to males than to females. Frieze et al. (2006) suggest that the male role in society is to work for pay most of their lives and do well in their jobs. In order to keep their job, male employees are willing to have bigger job commitments to their organisations, especially during an economic recession.
(3) Job Levels: Once an organisation imposes a downsizing strategy because of an organisational decline during an economic recession, the survivors are mostly higher-level professionals and some middle-level skilled employees who are expected to make the organisation function and ultimately succeed with fewer personnel (Allen et al. 2001). Lower level employees are mainly unprofessional and unskilled workers. Allen et al. (2001) point out that organisational downsizing is usually viewed as a threat to blue-collar workers. Generally, blue-collar workers are commonly perceived as being at a relatively lower level. They are easily replaced at any point of time, even in stable economic conditions. In this respect, there is no doubt that they lack confidence about their prospects in an economic downturn.

(4) General Employees in the Environments of Organisational Decline and Downsizing:
In the time of the GFT, it was evident that the trend of economic activities was toward a slowdown. Through the mass media, government officials and financial analysts continued delivering pessimistic messages about the deterioration of local business environments as well as discouraging financial figures reflecting the prevailing recession in our economy. Organisations commonly reacted to such circumstances with downsizing and budget-cutting strategies, which resulted in layoffs (Allen et al. 2001; Selmer and Waldstrom 2007), or by encouraging designated employees to leave voluntarily by offering them early departure and early retirement incentive packages to them (Armstrong-Stassen & Schlosser, 2008). Of course, layoffs resulted in the biggest suffering for employees. No one could predict how long the time of adversity would last. Not surprisingly, the atmosphere of economic uncertainty pervaded Hong Kong society. Therefore, many people lacked confidence about their job prospects and job status. When the economy is in a downturn, employees are likely to be sensitive about the changed environmental factors that could affect their jobs. As a result, firm commitment to jobs becomes necessary for employees. Especially in many cases of organisational downsizing owing to organisational decline, firms may create new and additional responsibilities for survivors and, in turn, cause an increase of employees’ role overload (Allen et al. 2001). If ‘the work’ is not really important to the individuals, the positive attitudes toward job involvement are not likely to be strongly held (Lines 2005). In contrast, when the job market is fading, having a job becomes extremely important to individuals. In addition, job involvement is the extent to which individuals devote themselves to and psychologically identify with their
work (Lodahl & Kejner 1965). So, this phenomenon occurs frequently during periods of environmental adversity.

In order to make up for the loss of manpower, stronger commitment is required from the remaining employees. Hence, individuals’ emotional attachments to their organisations are regarded as indicating their affective commitment as well as continued commitment with the organisational goals and values (Meyer & Allen 1997). Under deteriorating economic conditions, declining organisations strive for survival and their employees try hard to keep their jobs. To balance the needs of both sides, certain strategies of resource saving as well as salary cutting are likely to be imposed, and therefore P-O value congruence is likely to be enhanced. According to Ambrose et al. (2007), compatibility between employees and organisations occurs when at least one entity provides what the other needs, or when they share similar fundamental values, or both.

When struggling for survival, it is a common phenomenon that declining organisations adopt a downsizing strategy; that is, pay-cuts as well as layoffs. The wave of lay-off inevitably gives employees a sense of joy insecurity. Shoss (2017) has developed a framework of four overarching mechanisms – stress, social exchange, job preservation motivation, and proactive coping – through which to influence reactions to job insecurity. Shoss illustrates negatively that “Stress” comes from the fears of unemployment and uncertainty, and “Social Exchange” results in an imbalance in the exchange relationship between employee and employer. However, positively, “Job Preservation Motivation” reflects employees’ endeavor to demonstrate their worth to the employer by devoting extra effort toward behaviours, and “Proactive Coping” means that job-insecured persons might pursue educational opportunity to enhance potential job prospect. Generally, Campbell-Jamison et al. (2001) point out that fears about job insecurity are very strong among survivors. In order to retain their jobs, the remaining employees are usually willing to accept a pay cut or a reduction in benefits rather than be laid off. According to the practical experiences of the researcher and certain human resources managers shared in the seminar held by the Workplace Consultation Promotion Division of the Labour Department on December 11, 2008, some employees even proposed self-salary cuts during the financial crisis in 1998 as well as the later GFT that began in September 2008. In addition, many employees are
burdened with a workload heavier than before due to organisational decline and budget-cutting, and they still try hard to remain in the organisation. To most employees, keeping their job is extremely important because they would be unable to get any form of unemployment protection from the existing social security system in Hong Kong. In view of this situation, people’s job withdrawal intentions appear to be very low.

In this research, the researcher was surprised by the results of the hypothesis testing that showed the unexpected result that ‘organisational downsizing’ does not have a significant relationship with either employee work attitudes or work behaviours. This result is probably because ‘organisational downsizing’ is derived from ‘organisational decline’ during an economic recession. Logically, it is possible that ‘organisational decline’ could cause ‘organisational downsizing’, but it seems unlikely that ‘organisational downsizing’ could cause ‘organisational decline’. Downsizing is an organisational decision to reduce the workforce size and to change work practices to improve effectiveness and efficiency (Freeman & Cameron 1993), and it may be implemented in any time period, not only in economic downturns. So, people may have more concerns about ‘organisational decline’ rather than ‘organisational downsizing’, especially in the time of the GFT.

5.7 Contribution to Knowledge and Society

(1) Promotion of Attitude Study helps organisations to manage HR
Since attitudes have a considerable influence on behaviour, organisational design should aim to choose the organisational structures and procedures that best contribute to the alignment of individual attitudes and the formation of collective goals (Costa & DeMatos 2003).

Regardless of the nature of an organisation, its human resources management is generally regarded as a very important topic for discussion. The area of human attitudes can be the starting point to study human resources management. Because the human being is the most complicated factor to manage, personnel practitioners as well as psychologists are unceasingly investigating and cultivating this factor for the
wellbeing of our various organisations and society as a whole. Quite a lot of management theories were originally derived from the discipline of social psychology. In addition, according to Fishbein and Ajzen (1974), the concept of attitude has played a major role in the history of social psychology. With respect to this linkage, Thomas and Znaniecki (1918) and Watson (1925) contend that the field of social psychology was originally defined as the scientific study of attitudes because it was logically assumed that attitude was the key to understanding human behaviours. From the perspective of business administration, better management of people is crucial to the success of the overall organisation, so people’s attitudes need to be studied first in order to predict human behaviours. Hence, the purpose of this thesis is not only for academic aims, but also to make social and organisational contributions.

(2) Creation of a New Model suited to Attitude Study in the GFT

In the domain of work, it is crucial to have a systematic understanding of employees’ attitudes for forecasting workforce behaviours in relation to overall organisational performances and resulting in corporate strategy formulation. The timing of this study coincided with the eruption of the GFT so a unique model was formed. The researcher has named this model the ‘GFT Work Attitudes Model’, and it is unique since no one has ever conducted such a study before. A search of the literature shows that work value studies are numerous, but work attitude studies are not. After all, topics related to the application of work attitudes associated with economic adversity may be rare, and they cannot be found in the data bases of the public libraries up to this moment. The researcher strongly believes that this model covers certain applications of work attitudes in which variables are regarded as special variables that cannot stand alone without being accompanied by attitude objects. Hence, undertaking such a study and applying the special variables of “work attitude objects” was interesting and meaningful. In this project, enhanced by specially-designed diagrams, charts and tables, the researcher has also developed a special instrument to measure work attitudes by using a tailor-made “seven-point negative/positive scale”. In a future attitude study, researchers can also use the said instrument when measuring certain attitude variables and displaying the outcome-values by a visual exhibition; for example, if the value expression of a respondent is +3, it is certain that his or her attitude is extremely positive toward the object of measurement; conversely, if it is -3, it represents an extremely negative attitude. In
view the above considerations, the researcher believes that this project is worthy of reference in future attitude research studies.

(3) A call to organisations to treat their employees better
One motivation for this survey research has been a mission to make the public aware of the importance of employees’ work attitudes to the success of organisations as well as to the stability of society in a broader sense. On account of their experiences in the GFT, people may have already formed certain attitudes in the domain of work. Therefore, the overall research results are likely to reflect general working people’s attitudes, feelings, and possibly expressions of their needs in the workplace. One of the most important findings from this study shows that the great majority of employees in Hong Kong are cooperative, persevering and diligent workers as they were willing to take on additional duties and work longer hours, regardless of low job satisfaction during the difficult time that their organisations experienced in the wake of the GFT. At such times, employees usually bear certain pressures and sufferings in order to match their organisations’ values and goals to ensure mutual survival in an environment of adversity. As a social contribution, the researcher wants to deliver a message to all employers calling for fair and better treatment of their employees in the event of another cyclical economic downturn in Hong Kong in the future.

(4) Recommendation to government for improving the social welfare system
From the review of social literature, it is understandable that Hong Kong is not a welfare city. Unlike most Western nations, Hong Kong has lacked a good social security system to protect people’s livelihoods when they are facing unemployment due to organisational decline or downsizing. Even though there is a Mandatory Provident Fund scheme (MPF), its purpose is purely employees’ minimum retirement protection, with these benefits being available only when the employee reaches 65. It is quite ironic that the Hong Kong government has enjoyed big surpluses for the past several years but has not established any form of program for helping unemployed citizens. In view of such a social deficiency, the researcher urges the government to set up a special unemployment fund to support those who are temporarily unemployed. The fund should be financed half by the government and half by employees when they are employed. It is suggested that the monthly contribution amount is equivalent to 3% of people’s salary, and this percentage is believed to be affordable by the
general employee in Hong Kong. It is logical to assume that a better protection scheme for the overall work force would generate positive work attitudes in the workplace so as to attain higher efficiency and performance for higher social productivity as well.

(5) Encouragement of attitude study to both public and private organisations for achieving high performances

Nothing is more important for success in business than a positive attitude since one’s work attitude can affect others’ moods and productivity (Ferrett 1994). For example, if someone is late to work, feels discouraged about their job, shows little enthusiasm, suffers from burnout, or dislikes the workplace, his or her co-workers will sense this, and they may respond with negative attitudes, or poor performance. But work attitude surveys can help organisations to better understand employees’ feelings so as to promote positive work attitudes, particularly under the influence of negative external conditions such as in poor economic conditions, by encouraging employees to attain the following: (1) the ability to adapt to change; (2) an openness to learning; (3) higher productivity; (4) the ability to work well with all types of people; (5) the ability to learn and grow on the job; (6) creativity in solving problems and seeing solutions; and (7) the ability to cope with stress (Ferrett 1994).

Protta’s (2008) research suggests that employee attitudes as well as organisational performance may be affected by the perception of employees that their organisations act in a trustworthy and ethical ways in their treatment of employees. It also provides further evidence that what is regarded as good ethical practice is also good business.

5.8 Limitations of the Research

A quantitative research project usually requires a bigger sample size so as to make valid generalisations about the whole population. A bigger sample size in turn requires more resources. This research is not a group project, and an individual’s capacity for handling large amounts of data is quite limited. For example, the ideal sample size (n=1,000) could not be attained in this research. The lack of enthusiasm of the invited trade unions and two conglomerates was not anticipated by the
researcher. Hence, the original research plan had to be revised. In the meantime, the inadequacy of the financial budget for this research was also a limitation. Moreover, the findings of this study may have certain shortcomings that affect the interpretation and generalisability of the findings on employee work attitudes since this research took place in Hong Kong where some factors of Chinese culture and a unique social security system were present. Therefore, the results of the overall research project may not be applicable in other regions of the world. In particular, the survey method, which is called ‘Mail Survey assisted by Multi-Level Dispatchers / Collectors’ is a brand-new approach based on a guanxi-oriented approach and is very different from a traditional mail survey. It obviously has a limitation that it is only suited to the study of a topic in general terms and is not suited to a research study of a specific group of objects. The researcher further acknowledges limitations regarding the sampling approach used for this research. The approach used is not regarded as being a typical probability sampling method, even though its sampling units are not selected based on the personal judgment and interests of the researcher. Notwithstanding this, the sample size was not small as it covered 562 employees of various fields of businesses; however, this sampling method was unable to equalise the chances of any member of a population being selected as part of the data collection process. So, this can only be regarded as a semi-probability sampling approach that has ‘a minimum degree of randomisation’ in the distribution of respondents, as was already explained in Sections 1.8 and 3.5 of this study.

Additionally, this is a cross-sectional study so that no comparisons can be made with other periods of economic conditions. The researcher only examined the levels of positivity or negativity of employees’ work attitudes toward certain work behaviours during the period of economic recession that resulted from the GFT. But it may not be possible to know how these attitudes change and how they differ from what occurs in normal or prosperous economic times. In view of this shortcoming, future research is highly recommended to enable comparisons when economic conditions return to a status of solidity or prosperity.
5.9 Recommendations for Future Research

Since this project has the above limitations, the researcher recommends the use of a comparative study of employees’ work attitudes for observing their changes under various economic conditions in different time periods. It is hoped that work attitude research will be carried out in a normal economic environment and another one in a booming economic environment. As this research has already been undertaken in a depressed economic environment, the findings and results of all three research projects will constitute a complete study of employees’ work attitudes under a full range of economic conditions. The researcher believes that it is better to have a team of at least three academics or DBA students to conduct such a comparative study in different time frames. Therefore, the results and key figures, as well as other findings about various degrees of negativity or positivity of the six dimensions of employees’ work attitudes from this study, can be used for reference and comparison in such recommended research projects in the future.

5.10 Conclusion

Having reviewed the relevant literature, the researcher has learnt that environmentally related factors could influence people’s work attitudes. In the economic recession that was prevailing during the GFT, this research put the three selected environmentally related factors, belief about the damage caused by the GFT (BFT), organisational decline (ODC) and organisational downsizing (ODS) into the domain of work. It was found that the former two factors, BFT and ODC, could influence employees’ work attitudes and that these attitudes in turn affected their related six dimensions of work behaviour. However, it was found that ODS could not do so.

In many cases, organisational downsizing is an intentional proactive management strategy that may be applied in both booming and recession economies, particularly in a declining organisation; however, organisational decline is an involuntary negative consequence of non-adjustment to adverse environmental circumstances (Selmer & Waldstrom 2007). In other words, employees’ concerns about organisational decline may include their concerns about organisational downsizing. Therefore, the findings
reveal that organisational decline has a salient impact on general employees’ work attitudes and influences their related work behaviours as well.

Again, the reason why ‘organisational downsizing’ did not strongly influence employees’ work attitudes during the global financial tsunami is probably that it may happen at any time not just in an economic downturn or in adverse environmental conditions. Moreover, it may be also because not every employee is affected by a downsizing strategy; it is more likely to affect those who are less productive or who show less initiative. So, I believe that organisational downsizing only affects certain unwanted persons. Good employees may be retained, and they do not have to worry about layoff and benefit-cut.

Organisational decline is related explicitly to the organisation’s diminishing sales revenues or financial difficulties, leading to downsizing strategies that directly affect the benefits of all employees so that people are more serious about organisational decline. That is why organisational decline can definitely influence employees’ work attitudes at any time, especially in periods of global financial crisis. However, the most important determinant is the belief about the damage due to all such negative factors altogether in the time of the global financial tsunami. It is very true that employees usually suffer from damage to their wellbeing and benefits in situations of actual organisational decline as a result of pay cuts, work overload, job insecurity and layoffs. Those who do not presently encounter the above situations may still have worries about whether their organisations will adopt these measures when the economic conditions get worse. So, they may have the belief that the damage caused by the GFT could fall on them soon. It is logical that this kind of belief will inevitably affect employees’ work attitudes as well as their work behaviours.

Based on the facts and theoretical interpretations, the researcher admits that the two independent variables, belief about damage due to the GFT (BFT) and organisational decline (ODC), can significantly explain the influence of employees’ work attitudes on the six dimensions of their related work behaviours. Hence, in this research, it is proved that both BFT and ODC have impacts on employees’ work attitudes. It is also known from the analysis in this research that work attitudes can influence work behaviours and that the relationship between either BFT or ODC and work behaviours
is mediated by related work attitudes. Lastly, a similar degree of negativity or positivity of employees’ work attitudes will generate a relatively similar degree of negativity or positivity in their work behaviours, with the exception of the relationship between job satisfaction and job withdrawal intention.

All in all, this research identifies the relationships that three selected environmentally related factors have with employees’ work attitudes, and with their related work behaviours. It also ascertains the degree of negativity or positivity of the six dimensions of employees’ work attitudes during the economic downturn in the time of the GFT. Moreover, the valuable experiences and observations from several seminars of HR practitioners regarding employees’ work behaviours during the time frame of the GFT have provided very good support for the conclusions of this research study. In short, a better understanding of employees’ work attitudes and their related work behaviours is in the best interests of both private and public organisations in Hong Kong.
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Further Reference about article presentation method:

All articles of the *Journal of Applied Psychology*, volume 102, number 9, September 2017.
Appendices

Appendix I: Basic Individual Values


The ‘Three Universal Requirements’ for Basic Individual Values are (1) needs of individuals as biological organisms, (2) requisites of coordinated social interaction, and (3) requirements for the smooth functioning and survival of groups. Which cover the following 10 aspects:

1. Power – Social status and prestige, control or dominance over people and resources (Social Power, Authority, Wealth).
2. Achievement – Personal success through demonstrating competence according to social standards (Successful, Capable, Ambitious, Influential).
3. Hedonism – Pleasure and sensuous gratification for oneself (Pleasure, Enjoying life).
7. Benevolence – Preservation and enhancement of the welfare of people with whom one is in frequent personal contact (Helpful, Honest, Forgiving, Loyal, Responsible).
8. Tradition – Respect, commitment and acceptance of the customs and ideas that traditional culture or religion provides (Humble, Accepting my Portion in Life, Devout, Respect for Tradition, Moderate).
9. Conformity – Restraint of actions, inclinations and impulses likely to upset or harm others and violate social expectations or norms (Politeness, Obedient, 

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Self-discipline, Honoring Parents and Elders).


Appendix II: Work Value Variables

It is quite clear for us to see that work value variables and work attitude variables are applied by scholars interchangeably as Adkins and Russell (1997) have defined work value variables as below:

1. Job Satisfaction
2. Organization Commitment
3. Job Choice,
4. Judgment of P-O Fit
5. Job Performance.
Appendix III:  Work Value Variables

Selmer and Waldstrom (2007) constructed a questionnaire using a 24-item instrument on general work values originally developed by Elizur (1984) as below:

*Cognitive:*

1. Advancement, chance for promotion
2. Feedback, concerning the results of your work
3. Job status
4. Achievement, in work
5. Job interest, to do work which is interesting to you
6. Meaningful work
7. Opportunity for personal growth
8. Use of ability, and knowledge in your work
9. Responsibility
10. Contribution to society
11. Independence in work
12. Company, to be employed by a company for which you are proud to work
13. Influence in work
14. Influence in the organisation

*Affective:*

1. Recognition for doing a good job
2. Co-worker, fellow workers who are pleasant and agreeable
3. Esteem, that you are valued as a person
4. Opportunity to meet people and interact with them
5. Supervisor, a fair and considerate boss

*Instrumental:*

1. Pay, the amount of money you receive
2. Benefits, vacation, sick leave, pension, insurance, etc.
3. Job security, permanent job
4. Convenient hours of work
5. Work conditions, comfortable and clean
Appendix IV: Work Value Variables

However, Li, Liu and Wan (2008) applied from Sharon (2003) as many as 29 items of work value variables in their study as below:

1. Add beauty to the world
2. Feel like my contribution
3. Help plan the work of others
4. Gain prestige within the field
5. Proud to make good products
6. Try out new idea and suggestion
7. Create something new
8. Feel mental challenge
9. Keep solving new problems
10. Look forward to some change
11. Often involve in group activity
12. Do something benefit others
13. Feel a member of the group
14. Good contact with co-workers
15. Add to the well-being of others
16. Pleased after a day’s work
17. Current job meet consumption
18. Have freedom in my area
19. Believe not to lose job
20. Satisfied with current life
21. Can balance work and life
22. Know my job will last
23. Can get a raise
24. Use leadership ability
25. Have a fair supervisor
26. Do many different things
27. Contribute new ideas
28. Enjoy current job
29. Workplace is satisfied
It is apparent that these 29 variables resemble very much Elizur’s (1984) 24 variables as they can be used to study different levels of working people and of diverse cultural contexts. Since these variables are self-explanatory and explicitly understandable, the review of literature does not further define the meanings of each such items.

**Appendix V: Work Attitude Variables (Work Behaviours/Work Attitude Objects)**

Likewise, Ambrose, Arnaud, Arnaud, and Schminke (2008) defined job attitude variables as below:

1. Job Satisfaction,
2. Organisational Commitment,
3. Turnover Intentions,
4. Pre-conventional – Instrumental Fit, (part of P-O fit)
5. Conventional – Caring Fit, (part of P-O fit)
6. Post-conventional – Independent Fit. (part of P-O fit)
Appendix VI: Work Attitude Variables (Work Behaviours/Work Attitude Objects)

Similarly, Allen, Freeman, Russell, Reizenstein and Rentz (2001) have defined job attitude variables as below:

1. Organisational Commitment,
2. Role Clarity,
3. Turnover Intentions,
4. Role Overload,
5. Job Involvement
6. Job Satisfaction – Top Management
Appendix VII: Work Attitude Variables (Work Behaviours/Work Attitude Objects)

According to Somers and Birnbaum (2001), work attitudes can be assessed with a broad constellation of psychological reactions to the job and to the organisation. The set of work attitude variables applied in their research was previously defined by Lankau and Scandura (1996) as below:

1. Job Satisfaction—There is a very broad conceptual definition for this variable that can be broken down into many items as demonstrated by the research of Elizur (1984) and Sharon (2003), and which has also been described in the context of this thesis.

2. Job Involvement—With reference to Allen et al. (2001), it is possible that job involvement moderates the predicted relationships between the environmental and outcome variables. Job involvement is the extent that an individual is devoted to and psychologically identifies with his or her work (Lodahl & Kejner 1965).

3. Affective Commitment—This is defined as employees’ emotional attachments to their organisations and the extent to which individuals identify their strong commitment with the organisational goals and values (Meyer & Allen, 1997).

4. Continuance Commitment—This refers to employees’ willingness to commit themselves in the organisation continuously (Meyer & Allen, 1997).

5. P-O Value Congruence—According to Ambrose, Arnaud and Schminke (2007), the person-organisation (P-O) fit literature explores the impact of congruence (or fit) between individual and organisational attributes and values. It is defined as “the compatibility between people and organisations that occurs when (a) at least one entity provides what the others needs, or (b) they share similar fundamental characteristics, or (c) both.”, pp. 323-333. Hence, this is the congruence between individual and organisational values.

6. Job Withdrawal Intention—Explicitly, it is also commonly known as turnover intention that employees expect to quit their jobs and leave the organisation.
Appendix VIII: The Invitation Letters

Dear Sir or Madam:

Re: A Survey Study of Employee Work Attitudes in the Time of Economic Recession under the Shadow of the Global Financial Tsunami

Since the eruption of the Global Financial Tsunami in September 2008, Hong Kong has entered into a period of economic recession and every one of us is being affected by it. Many people are suffering from different degree of pecuniary or psychological damages. The atmosphere of frustration, anxiety, stress and worries may be felt by the general employees in their workplaces. This survey is to study the work attitudes of people under the adverse economic conditions and explore how they respond to the prevailing phenomenon of organisational decline or downsizing during the difficult time in our society.

More importantly, the main objective of this survey is also to enhance the employers and the society as a whole to further understand the work attitudes and feelings of general employees in the current recession time in Hong Kong’s economy. Calling for social responsibilities such as organisations’ ethical values in respect of fair and better treatments to employees and avoidance of unnecessary layoffs will be proposed by the results of the survey which in turn will arouse the public awareness about the common feelings, moods and needs of the mass workforce in their organisations.

Therefore, the participation in this survey from any one of you will be considered an important contribution to the wellbeing of the mass working classes of our society.

Meanwhile, please be ensured that your personal data collected will be treated strictly confidential and will be destroyed upon completion of this research project. Please also feel easy in mind as our academic and professional ethics are trustworthy.

Thank you for your cooperation!

Yours sincerely,

Mr. S.Y. Cheng
Researcher
The following is the Chinese Version of the Invitation Letter

(以下是邀请函之中文译本):

親愛的先生/女士，您好！

關於：在環球金融海嘯下，僱員對經濟衰退期間工作的態度/感受之調查

自從環球金融海嘯在2008年9月爆發後，本港已步入了經濟衰退期，而我們每人皆蒙受其影響。市民大眾在金錢上或心理上都面對不同程度的損失。在工作間充滿了一股挫折、焦慮、憂鬱的氣氛，一般僱員都有同感。我們基於如此，故作出調查考究在經濟逆境中僱員的工作態度如何面對機構衰微或公司瘦身的金融危機流行現象。

其實，這個調查研究的主要目的是增進僱主及社會整體在本港經濟困難期間對僱員的態度取向及心理感受加以了解。同時，我們呼籲各行業機構負起社會責任、秉持機構倫理價值觀、公平對待員工、盡可能避免解僱潮。所以，這個調查有助提高公眾察覺到打工一族的感受及需要，而預期的研究結果將如實反映僱員在金融海嘯下香港經濟低迷時的工作取態及感受。

因此，你的參與這個調查，可以說是對我們社會及整體打工一族的貢獻。請放心，您所提供的資料是絕對保密的。在這個研究工作完成後，我們會妥善地把資料銷毀。請取信於我們的學術研究操守及專業精神。

謝謝您的合作！

研究員：鄭兆英 謹上
2010年 月 日
The following is the Invitation Letter for the second data collection. Its contents are similar to those of the first data collection. Since the objects of survey are the employers or management-level people, they are assumed to understand English so that there is no Chinese version for this invitation letter:

Dear Sir or Madam:

Re: A Survey of Employers/Managers/Supervisors’ evaluation of their Employees’ Work Behaviours based on observing their Work Attitudes during an Economic Downturn

Since the eruption of the Global Financial Tsunami in September 2008, Hong Kong had entered into a period of economic downturn and almost every one of us was affected by it. In fact, many people suffered from different degree of pecuniary or psychological damages. The atmosphere of frustration, anxiety, stress and worries might be felt by the general employees in their workplaces. This survey is to study Employers/Managers/Supervisors’ evaluation of their employees’ work behaviours under the adverse economic conditions and explore how employees respond to the prevailing phenomenon of organizational decline or downsizing during the difficult time in our society.

More importantly, the main objective of this survey is also to enhance the employers and the society as a whole to further understand the work behaviours of general employees during an economic downturn in Hong Kong. The implication tries to call for social responsibilities such as organizations’ ethical values in respect of fair and better treatments to employees and avoidance of unnecessary layoffs and the survey will also arouse employers and managements’ awareness of the common feelings, moods and needs of the mass workforce in their organizations. Therefore, the participation in this survey by you as Employers/Managers/Supervisors will be considered an important contribution to the wellbeing of our society.

Meanwhile, please be ensured that data collected will be treated strictly confidential and will be destroyed upon completion of this research project.

Please also feel easy in mind as our academic and professional ethics are trustworthy.

Thank you for your cooperation!

Yours sincerely,

Mr. S.Y. Cheng
Researcher
Appendix IX: Government Master Pay Scale

(This MPS is for the classification of different job levels)

**Government Master Pay Scale**

(Source: Civil Service Bureau)

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### Appendix X: Research Timetable

#### Research Timetable

<table>
<thead>
<tr>
<th>Action Plan</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tbody>
<tr>
<td>Month</td>
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<tr>
<td>Literature Review</td>
<td>*</td>
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<td>Questionnaire Revision</td>
<td>*</td>
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<td>Pilot Test</td>
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<td>*</td>
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<td>Post-Test Evaluation</td>
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</tr>
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<td>Training Assistants</td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Survey Preparation</td>
<td>*</td>
<td>*</td>
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<td>Survey Proceeding</td>
<td>*</td>
<td>*</td>
<td>*</td>
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<tr>
<td>Analysis of Survey Data</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Report</td>
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</tbody>
</table>
Please note: The pre-research work began in November 2008, two months after the eruption of the ‘Global Financial Tsunami’.
Appendix XI: Questionnaires for the First and the Second Data Collections are shown on the following pages.

1st August 2010

Dear Sir or Madam,

Re: A Survey Study of Employee Work Attitudes in the Time of Economic Recession under the Shadow of the Global Financial Tsunami

Since the eruption of the Global Financial Tsunami in September 2008, Hong Kong has entered into a period of economic recession and every one of us is being affected by it. Although the worst time of the 'Global Financial Tsunami' has passed, the general workforce is still facing difficult employment conditions such as over-workload, long working hours, fewer job vacancies etc. The atmosphere of frustration, anxiety, and worries can still be seen in the workplaces. So, this survey is to study the work attitudes of people under the aftermath of the 'Global Financial Tsunami' and to explore how they respond to the prevailing phenomenon of organizational decline or downsizing during the time period of such poor employment conditions in our society.

More importantly, the main objective of this survey is also to enhance the employers and the society as a whole to further understand the work attitudes and feelings of general employees in the current recession time in Hong Kong's economy. Calling for social responsibilities such as organizations' ethical values in respect of fair and better treatments to all employees and avoidance of unnecessary layoffs will be proposed by the results of the survey which in turn will arouse the public awareness about the common feelings, needs and needs of the mass workforce in their organizations.

Therefore, the participation in this survey from any one of you will surely be considered an important contribution to the wellbeing of the mass working classes of our society.

Meanwhile, please be ensured that your personal data collected will be treated strictly confidential and will be destroyed upon completion of this research project. Please also feel easy in mind about this as our academic and professional ethics are trustworthy.

Thank you for your cooperation!

Yours sincerely,

Mr. S.Y. Cheng
Researcher

Note: This Survey is being undertaken by an Australian Public University
(Southern Cross University) www.scu.edu.au

親愛的先生 / 女士，您好！

為研討金融海嘯後，僱員對經濟疲脹期工作的情緒及感受

自從金融海嘯呼嘯在 2008 年 9 月爆發後，本地已步入了經濟衰退期，而我們每人皆受影響。當金融海嘯的影響持續時刻，香港在經濟上都經歷着前所未有的壓力。企業機構在失業，工作量增加及薪資下滑的情況下，工作坊的簡短性，工作坊的增加及職工的數字，都能反映公司在經歷惡劣環境下僱員的工作態度和他們對如何面對機構及整個公司現況下的金融危機的態度進行研究。

其實，這個調查研究的目的是尋覓僱員及社會整體在本地經濟困難期對僱員的態度及社會感受的了解。同時，我們呼籲各企業機構縮短工作週期，應持續提供較佳的薪酬，公平對待員工，並保持長期發展。所以，這個調查是有意提高員工對工作的感受及安撫，而預期的結果將對企業僱員在金融海嘯下的香港經濟低迷時的工作態度及感受。

當然，你的參與這個調查，可以說是對我們社會及整個打工一族的貢獻。因此，您所提供的資料是最為保密的。在這個研究工作完成後，我們會妥善地把資料銷毀，並不會用於我們的學術研究及其它目的。

謝謝您的合作！

研究員，蘇永英 執上
2010年 8月1日

備註：此次調查報告載於澳洲公立西貢大學 的一項學術研究計劃，www.scu.edu.au
Questionnaire for Investigating Employee Work Attitudes during an Economic Downturn in Hong Kong

The CONTENTS of this FORM are Absolutely CONFIDENTIAL. INFORMATION identifying the RESPONDENT will NOT be DISCLOSED Under Any CIRCUMSTANCES.

Notes for Answering the Questionnaire:

1. This Survey is being undertaken by an Australian Public University (Southern Cross University).
2. The Questionnaire contains nine sections and two open questions besides basic Personal Data.
3. The total time required for completing this form is about 15 minutes. Fill out all questions within fifteen minutes.
4. If you have any query, please contact Mr. Cheng Siu-Ying at 6094 1917.

Surname* only 具姓氏：______ (Please tick 請在 下方戳 註) Mr./Mrs./Miss/Miss 女士/小姐______
Name & Organization Optional: Optional 有組織名稱：______
Nature of Business 業務性質：______
Job Title or Position職位名稱：______ Year of Services 年資：______

Please put a TICK in the following spaces properly: 請選擇以下方塊並填上一劃:

Monthly Salary 月薪：
Less than 少於 $6,000 ______ $6,000 - $10,000____ $10,001 - $15,000 ______ $15,001 - $20,000____
$20,001 - $25,000 ______ $25,001 - $30,000 ______ $30,001 - $40,000 ______ $40,001 - $50,000 ______
$50,001 or up 以上________ If hourly paid 按時薪：請填 請填: $/hour ______
Age 年齡：(18-26 27-35 36-43 ) (44-51 52-59 60 or above____)
Marital Status 婚姻狀況： Married 已婚 Single 單身____

Education 教育： Primary School 小學____ Secondary School 中學____
Vocational Training 職業訓練： Associate Degree or Diploma副學士或文憑____
Bachelor Degree 學士學位： Postgraduate or above學士或者以上程度____

Other Professional Qualification: (Please state if any) 其他專業資格：

Please go to the next page 請往下頁

Page 1
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Statement</th>
<th>Scale (1-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>There are chances for advancement/promotion in Economic Downturn.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>2</td>
<td>Many achievements in work can be attained in Economic Downturn.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>3</td>
<td>My job interest is high in Economic Downturn.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>4</td>
<td>Meaningful work can be attained in Economic Downturn.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>5</td>
<td>Opportunity for personal growth is available in Economic Downturn.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>6</td>
<td>Recognition for doing a good job is attainable in Economic Downturn.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>7</td>
<td>Job esteem is attainable in Economic Downturn.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>8</td>
<td>Opportunity to meet people and interact with them can be attained in Economic Downturn.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>9</td>
<td>I accept a pay-cut instead of layoff if my organization is downsizing.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>10</td>
<td>I am willing to accept benefits cut if my organization is declining.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>11</td>
<td>Job security is unaffected by Economic Downturn.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>12</td>
<td>Convenient hours of work to fit my personal schedule is needed in Economic Downturn.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
</tr>
<tr>
<td>13</td>
<td>Comfortable work conditions are attainable in Economic Downturn.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐</td>
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</table>
(II) Job Involvement during Economic Downturn [JI]

<table>
<thead>
<tr>
<th>1 = Strongly Disagree</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7 = Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 I am concerned about job status— job title, workload and work hours.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2 I endeavor to use my ability &amp; knowledge to work for my organization.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3 I will try to influence co-workers to work positively in times of adversity.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
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</table>

(III) Affective Commitment during Economic Downturn [AC]

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<th>5</th>
<th>6</th>
<th>7 = Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 I am willing to take additional responsibilities during difficult times.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 I don’t mind without the assistance from helpers or subordinates.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 I can do my job independently without others’ help.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
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(IV) Continuance Commitment during Economic Downturn [CC]

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<th>6</th>
<th>7 = Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Feedback concerning the results of work is important in adversity.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2 Avoid making errors at work against loss is to the interest of society.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
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(V) P-O Value Congruence during Economic Downturn [PO]

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<th>5</th>
<th>6</th>
<th>7 = Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 To match personal &amp; organizational values is important in adversity.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 My loyalty to work is able to influence others in the organization.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
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<tr>
<td>3 Pleasant and agreeable attitudes among co-workers are important.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Fair and considerate boss can lead people to get through adversity.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
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### (VII) Job Withdrawal Intention during Economic Downturn (JW)

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<th>5=Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>During Economic Downturn, I tend to leave the organization if my workload is heavier than before.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>2</td>
<td>During Economic Downturn, I tend to leave the organization if my salary has been cut.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>3</td>
<td>During Economic Downturn, I tend to leave the organization if my benefits have been cut due to poor business result of the organization.</td>
<td>[ ]</td>
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### (VIII) Beliefs about the damages of Global Financial Tsunami (BFT)

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<th>4=Agree</th>
<th>5=Strongly Agree</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>You believe the damages of 'global financial tsunami' can change your perspective toward your well-beings in the workplace?</td>
<td>[ ]</td>
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</table>

### (VIII) Organizational Decline is having an Impact on Work Attitudes (ODC)

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<th>3=Neither Agree nor Disagree</th>
<th>4=Agree</th>
<th>5=Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Organizational decline generally means a continuous down-turn of organizational performance, i.e. suffering from diminishing revenues as well as shrinking market shares.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>2</td>
<td>Do you agree this kind of phenomenon affects your attitudes / feelings in the workplace?</td>
<td>[ ]</td>
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<td>[ ]</td>
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</table>

### (IX) Organizational Downsizing is having an Impact on Work Attitudes (ODS)

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<th>3=Neither Agree nor Disagree</th>
<th>4=Agree</th>
<th>5=Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Organizational downsizing generally refers to a reduction of the personnel or the manpower size and re-design of the work flow.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td>2</td>
<td>Do you agree this kind of phenomenon affects your attitudes / feelings in the workplace?</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
</tbody>
</table>
Additional Questions

(1) What other impacts of Economic Downturn are affecting your work status? Please mention if any.

(II) If you have any opinion or complaint about this survey, please describe below:

The End 完成

Thank You Very Much for Your Kind Contribution to this Survey

非常感謝你對這項調查的參與和貢獻。

Respondents are welcome to obtain a summary of the results of this survey when its report is completed.

If needed, please put down your address or e-mail address and phone number below now:

Name姓名： Contact Tel. 電話：
Address 地址：
Email 郵件：

For further inquiry about this survey, please contact the researcher’s Supervisor,
Dr. Raymond Cheng at phone no. 2782-2433 (HKIT)
如有更多諮詢關於此次調查，可打以下電話與研究員的導師 鄭瑞民博士聯絡：
2782-2433 (HKIT)
Questionnaire for Employer Evaluating Employees' Work Behaviours based on their Work Attitudes during an Economic Downturn in Hong Kong

The CONTENTS of this FORM are Absolutely CONFIDENTIAL. INFORMATION Identifying the RESPONDENT will NOT be DISCLOSED Under Any CIRCUMSTANCES

Notes for Answering the Questionnaire:
1. This is a Survey of Employers / Human Resources managers / Department Supervisors about their Employees' Work Behaviours based on their Work Attitudes during an Economic Downturn.

2. The purpose of this Survey is to understand the 5 Dimensions of Work Behaviours of employees during the period of an Economic Downturn in Hong Kong, i.e. in the Global Financial Tsunami.

3. This Evaluation of Employees' Work Behaviours should be based on retrieving their appraisal reports of the period during the Global Financial Tsunami.

4. This Evaluation about Employees' Work Behaviours in the Global Financial Tsunami can also be based on the recollections of the Employers / Human Resources Managers / Department Supervisors.

5. This is a General Evaluation about Employees' Work Behaviours in the Global Financial Tsunami.

In fact, this is a Retrospective Evaluation of Employees.

Personal Data 個人資料

Please tick 請勾選: Mr. 先生  Ms./Miss 女士/or 小姐____

*Name of Organization Optional 機構名稱可或可不填*

Organization* 機構名稱: __________ Nature of Business 業務性質: __________

Title or Position 領袖或職位名稱: Please tick 請勾選

(1) Employer 執行____ (2) HR Manager 人力資源經理____
(3) Department Supervisor 部門主管____

Please go to the next page 請往下一页

Page 1
1 = Strongly Disagree, 7 = Strongly Agree

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Employees have chances for promotion in Economic Downturn.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2</td>
<td>Employee achievement in work can be attained in Economic Downturn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Employee job interest is high in Economic Downturn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4</td>
<td>Meaningful work can be attained by employees in Economic Downturn.</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Opportunity for employees' growth is available in Economic Downturn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Recognition for doing a good job is attainable in Economic Downturn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Employees' Job esteem is attainable in Economic Downturn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Opportunity to meet people and interact with them can be attained in Economic Downturn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Employees accept payout instead of layoffs when company downsizing.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>10</td>
<td>Employees accept benefits cut when organization is declining.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>11</td>
<td>Employees' job security is unaffected by Economic Downturn.</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>12</td>
<td>Employees need convenient hours of work to fit their personal schedule in Economic Downturn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Comfortable working conditions are attainable in Economic Downturn.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## (ii) Job Involvement during Economic Downturn (JI)

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

1. Employees are concerned about job status—job title, workload & hours.

2. Employees endeavor their ability & knowledge to work for the company.

3. Employees try to influence co-workers’ attitudes positively in adversity.

## (iii) Affective Commitment during Economic Downturn (AC)

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

1. Employees are willing to take additional responsibility during adversity.

2. Employees don’t mind without the assistance from others in their work, or (Employees can do their job independently without others’ help.)

## (IV) Continuance Commitment during Economic Downturn (CC)

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

1. Employees’ feedback about the result of work is important in adversity.

2. Avoid making error at work against loss is to the interest of society.

## (V) B-O Value Congruence during Economic Downturn (BO)

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

1. To match employee & organizational values is important in adversity.

2. Employees’ loyalty to work influences co-workers in the organization.

3. Pleasant and agreeable attitudes among co-workers are important.

4. Fair and considerate boss can lead people to get through adversity.

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Please go to the next page
<table>
<thead>
<tr>
<th>(VII) Job Withdrawal Intention during Economic Downturn (JW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1=Strongly Disagree, 7=Strongly Agree</td>
</tr>
</tbody>
</table>

1 During Economic Downturn, employees tend to leave the organization if their workload is heavier than before.

2 During Economic Downturn, employees tend to leave the organization if their salaries have been cut.

3 During Economic Downturn, employees tend to leave the organization if their benefits have been cut due to poor business results of company.

<table>
<thead>
<tr>
<th>(VIII) Relate about the damages of Global Financial Tsunami (DE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1=Strongly Disagree, 7=Strongly Agree</td>
</tr>
</tbody>
</table>

1 Do you believe the damages of 'global financial tsunami' can change employees' perspective toward their well-being in the workplace?

<table>
<thead>
<tr>
<th>(IX) Organizational Decline is having an impact on Work Attitudes (ODG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1=Strongly Disagree, 7=Strongly Agree</td>
</tr>
</tbody>
</table>

Organizational decline generally means a continuous down-turn of organizational performance, i.e. suffering from diminishing revenues as well as shrinking market shares.

1 Do you agree this phenomenon affects employees' attitudes / feelings in the workplace?

<table>
<thead>
<tr>
<th>(X) Organizational Downturning is having an impact on Work Attitudes (ODP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1=Strongly Disagree, 7=Strongly Agree</td>
</tr>
</tbody>
</table>

Organizational downturn generally refers to a reduction of the personnel or the manpower size and re-design of the workflow.

1 Do you agree this kind of phenomenon affects your employees' attitudes / feelings in the workplace?

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Additional Questions

(I.) What other impacts of Economic Downturn are affecting your employees' work status? Please mention if any.

(II.) 基於您對現時經濟環境的影響，認為對貴機構的員工來說，還有甚麼其他影響？如有，請說明。

(II.) If you have any opinion or complaint about this survey, please describe below:

如有任何意見或投訴此次調查，請詳述於下。

The End

Thank You Very Much for Your Kind Contribution to this Survey

非常感謝你對這項調查的參與和貢獻。

Respondents are welcome to obtain a summary of the results of this survey when its report is completed.

若完成調查報告後，歡迎索取調查結果總結。

For further inquiry about this survey, please contact the researcher's Supervisor,

Dr. Herman Wu at phone no. 2782-2433 (HKIT)

如有更多查詢，可致電以下電話號碼求助及相聯：

2782-2433 (HKIT)