



THE IMPACT OF HUMAN RESOURCE PRACTICES AND ORGANIZATIONAL  
CLIMATE TOWARDS THE HIGH PERFORMANCE WORK SYSTEMS - A CASE  
STUDY OF ANGKASA

A thesis submitted to the College of Business  
in partial fulfilment of the requirements for the degree  
Master of Human Resource Management  
Universiti Utara Malaysia

BY  
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## **DECLARATION**

I declare that the substance of this project paper has never been submitted for any degree or post graduate program and qualifications.

I certify that all the supports and assistance received in preparing this project paper and all the sources abstracted have been acknowledged in this stated project paper.

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## ABSTRACT

In recent years, the High Performance Work Systems (HPWSs) has been deliberated among the academicians and business players within the industries. Unfortunately, the study on this issue has been, mostly focus on the big size organization and conglomerates. Considering this phenomenon, it has created a high level of desire and curiosity to conduct a study on HPWSs in the sector of cooperatives. After considering all factors, AngkatanKoperasiKebangsaan Malaysia Berhad (ANGKASA) has been selected as the case under study, because of its size, number of employees, nature of business and role in the cooperatives movement in Malaysia. In this study, human resource practices and organizational climate have been selected as the independent variables, while the high performance work systems, as a dependent variable. They will be tested in order to determine whether there is a relationship or influential forces among them. For the purpose of data analysis, a survey had been done to the employees of ANGKASA, by using the Simple Random Sampling. The analysis shows that there is a relationship between organizational climate and human resource practices with the high performance work systems towards ANGKASA. The number of questionnaire distributed were 450, where 260 employees had returned their questionnaire which consists of 58%. The correlation coefficient for the Organizational Climate for communication and Decision Making is 0.52,  $p < 0.00$ , Bureaucracy is -0.22,  $p < 0.00$  and Work Methods is 0.56,  $p < 0.00$  for the organizational climate. While for the human resource practices, the pearson correlation for Training and Development is 0.66,  $p < 0.00$ , Compensations is 0.56,  $p < 0.00$  and benefits is 0.59,  $p < 0.00$ . Thus, it is crucial for the organization to put a great emphasize on the significant roles played by these two variables in high performance work systems.

## ABSTRAK

Sejakkebelakanganini, SistemKerjaBerprestasiTinggitalahhebatdiperbincangkanolehahliakademikdanahliperniagaan di dalamindustri.Namun, isusistemkerjaberprestasinggiinilebihbanyakdifokuskankepadaorganisibersaizbesardankon glomerat.Melihatkepada situasi ini, iamenimbulkanperasaaningintahu yang tinggi di dalamdiripenyelidikuntukmembuatpenyelidikanberkaitanperkaraini di dalamsektorkoperasi. Bagitujuanpenyelidikanini, AngkatanKoperasiKebangsaan Malaysia Berhad (ANGKASA) telahdipilihsebagai unit analisisdisebabkanoleh faktorsaiz, jumlahpekerja, latarbelakangoperasidanperanan yang dimainkannya di dalamperkembangankoperasi di Malaysia.Di dalampenyelidikanini, duapembolehubahtelahdipilihaitu (1) AmalanSumberManusiadan (2) klimakOrganisasisebagaipembolehubahtidakbersandar, manakalaSistemKerjaBerprestasiTinggisebagaipembolehubahbersandar.Kedua-duapembolehubahiniakandiujiumentukansamadawujudnyahubungkaitataupengaruh di antaramereka.Bagitujuanpenganalisaan data, kajiselidiktelahdilakukankeataspekerja ANGKASA di manasoalankajiselidiktelahdiedarkankepadapekerja-pekerjainidenganmenggunakankeadahsampelrawakringkas.Dari hasilanalisis yang diperolehi, bolehdikatakanbahawaterdapathubungkait di antaraamalansumbermanusiadanklimakorganisasiterhadapsistemkerjaberprestasinggi.Seban yak 450 soalankajiselidiktelahdiedarkankepadapekerja-pekerja ANGKASA, dandarijumlahtersebut 260 kajiselidiktelahberjayadikutip yang menyumbangkepada 58%.Daripadaperkiraanstatistik yang dibuat, korelasikoefisienbagiklimakorganisasiuntukfaktorkomunikasidanmembuatkeputusanadalah 0.52,  $p < 0.00$ , birokrasiialah -.022,  $p < 0.00$  dankaedahkerjaialah 0.56,  $p < 0.00$ . Manakalauntukamalansumbermanusia, bagifaktorlatihandanpembangunanialah 0.66,  $p < 0.00$ , imbuhanialah0.56,  $p < 0.00$ , danfaedah pula sebanyak 0.59,  $p < 0.00$ . Makadenganini, adalahamatpentingbagiorganisasiuntukmemberikanperhatian yang seriuskeatasperananyang dimainkanolehduapembolehubahtidakbersandarini di dalam sistemkerjaberprestasinggi.

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# **CHAPTER 1**

## **INTRODUCTION**

### **1.0 INTRODUCTION**

The nature and pace of recent changes in the economic environment have motivated both managers and scholars to look for new sources of competitive advantage and profitability (Huselid & Becker, 1997). As a result, interest in how organizations might use the High Performance Work System (HPWS) as a “competitive instruments in the industries, and across market segments within industries” (Batt,2002; Boxall,2003) in ensuring their sustainability is seen critical. The call for this changes become more crucial due to the “changes in the atmosphere of global business and the continuing liberalization pressures occurring from economic and financial crisis provide new challenges as well as opportunities” (Nazlina, Siti Rohaida & Aizzat, 2011).

Due to the rapid changes in the business landscape as mentioned above, the business players started to realize they can no longer depend on the traditional methods of doing business, to ensure sustainability. Thus, they need to keep abreast with the latest technology, by giving sufficient training and development to the employees so that they are well-trained and competent in performing their work. Most organizations, nowadays, have started to see the notion of “employee-friendly” is important to keep up the employees’ motivation and job satisfaction, by creating a conducive and supportive working environment, so that they will work hard to achieve the organizational objectives, as well as possessing a high level of organizational citizenship behavior.

It is the intention of this study to see how the concept of the high performance work system can help the organization to have a competitive advantage, and at the same time ascertaining what are the other factors that may influence its successfulness. For the purpose of this study, two factors have been selected, which are the human resource practices and

organizational climate. From the data obtained, an analysis will be made to determine whether those factors have a great impact or have a relationship towards the HPWS.

In a general term, a High Performance Work System (HPWS) can be viewed as a key strategic lever, both as a mean to develop and sustain core competencies, and as a necessary condition for strategies implementation (Dyer,1993;Pfeffer,1994;Levine,1995). According to BusinessDictionary.com (n.d.), core competencies can be defined as a unique ability that a company acquires from its founders or develops and that cannot be easily imitated. Core competencies are what give a company one or more competitive advantages, in creating and delivering value to its customers in its chosen field.

HPWS is a concept where the organization striving to achieve its objectives and mission through people. Thus, it sees employees as a priceless or valuable asset. The organization can have the most up-to-date equipment with the latest technology, but without an innovative, highly motivated, well trained and competent employee, those sophisticated equipment will be useless. Pfeffer(1998) supporting this by saying that, human resource a vital factor that could affect the performance of organization.

Human resource practices and organizational climate are two independent variables that have selected in this study, to see their relationship with the HPWS. Since, HPWS is a concept where the organization tries to achieve its objectives through people or employees, thus the researcher considered these two factors are the most appropriate to be tested in relation to high performance work system. It is about time the human resource unit or department play a more active role and be a strategic partner to every unit or department in the organization. In today hyper-competitive global business arenas (D'Aveni, 1994), organization's stakeholders are demanding that all functional areas within the firm, including human resource function, clearly demonstrate their contribution to the overall organization's performance and ensure that firm's human capital contributes to the achievement of its

business objectives (Baird and Meshoulam,1988). The ability of the human resource practices to demonstrate their integral role in the achievement of improved organization performance is significantly crucial to justify the existence of human resource department. Thus, managing human resource functions strategically is vital in contributing to organizational performance (Lado and Wilson, 1994; Ulrich, 1997; Wright, McMahan and McWilliams, 1994).

Besides an employee friendly human resource practices, a conducive and supportive working environment is very important in order to ensure the employees are happy working with the organization. An unhappy worker normally will create a lot of disciplinary problems such as lateness, being rebellious, and absent without proper reasons. Organizational climate is important as it is seen as influencing day-to-day job experiences (Schneider and Hall, 1972). Hence, it must not be taken lightly in the implementation of high performance work systems.

This study was motivated by a desire to understand the role of human resource practices and organizational climate in creating a high performance work system in the cooperatives environment. As this paper will analyse the issue of High Performance Work System from the perspective of Co-operatives, it is vital to understand the meaning of co-operatives. According to the Royal Professor Ungku A. Aziz (2007), “A co-operative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise”.Cooperatives were found as an important and interesting context in which to study the effects of human resource practices and organizational climate because this sector has increasingly play important economic role and exist in an environment characterized by rapid change, ambiguity, and hyper-competition.

By size, majority of the cooperatives are small or medium size enterprise (SME). However, they must not be underestimated just because of their size. According to Asia-Pacific Economic Cooperation (APEC) (2002) pointed out that SMEs are deemed as supporters to larger enterprises as well as an important foundation in expanding business activities and sustaining economic growth. In sum, the cooperatives play a “vital role in contributing to the economy and are likely to be increasingly important as the economy becomes more global” (Nazlina et al., 2011).

**Figure 1 : Number of Cooperatives (Coop) and Turnover According to Cluster of Year 2009**

| Number of Cooperatives (Coop) and Turnover According to Cluster of Year 2009 |              |      |                    |      |
|------------------------------------------------------------------------------|--------------|------|--------------------|------|
| CLUSTER                                                                      | COOPERATIVES |      | TURNOVER           |      |
|                                                                              | NUMBER       | %    | TOTAL (RM billion) | %    |
| Big Scale Coop                                                               | 159          | 2.2  | 7.4                | 83.1 |
| Medium Scale Coop                                                            | 361          | 5.0  | 0.8                | 9.0  |
| Small Scale Coop                                                             | 716          | 10.0 | 0.4                | 4.5  |
| Micro Related Coop                                                           | 5,979        | 82.8 | 0.3                | 3.4  |
| TOTAL                                                                        | 7,215        | 100  | 8.9                | 100  |

SOURCE: The National Cooperative Policy 2011-2020 (Malaysia Cooperative Societies Commission)

Referring to Figure1 above, it can be seen that medium and small scale cooperatives constitutes of 5% and 10% of the total number of cooperatives with a turnover of 9% and 5% respectively. While the Micro related Coop constitute the highest figure, which is 83% of the number of cooperatives in Malaysia. Micro related cooperative is a cooperative which was formed solely for the purpose of providing loan to its members only.

This study is deemed necessary and important because of the significant roles play by the cooperatives which emphasizes the concept of “Socio-Economic”. It means that, the cooperatives are required to act as a normal business entity, which is to gain as much profit as possible, but those profits must be used to serve the needs of their members, in order to improve their standard of living, in terms of economically, socially, and culturally. This is in accordance with the provision stated in the Co-operative Societies Act 1993, Section 45 (1) “In the conduct of the affairs of a registered society, the members of the Board of such registered society shall exercise prudence and diligence of ordinary men of business....”. The focus of this paper is to analyse to what extent is the HR practices and organizational climate in an organization may affect the high performance work systems either from the perspectives of productivity, harmony working environment, and the efficient use of resources, by analysing the correlation between the HR strategies and organizational climates with the organization’s larger strategic objectives.

In view of this, it is the aim of this study to provide some insights to the cooperatives movement in Malaysia, on how to formulate a more efficient and effective methods in handling their employees, creating a more productive, supportive, creative, innovative and harmonious work environment to promote a high performance work systems in their organizations.

## **1.1 PROBLEM STATEMENTS**

The government has seen the need for the drastic changes to the directions and strategies applied to the cooperatives as to make them more competitive and innovative in an effort to prepare this sector for the high performance work systems driven by the high technology. This need is profoundly crucial as Malaysia is on her move to become a high income developed nation by the year 2020. To achieve this, all economic sectors, namely

public, private and cooperative have to play their roles in supporting the government's economic transformation program. The cooperatives can no longer depend on the traditional management systems, but changed to embrace a current or up to date ones, in this case the high performance work system. This is in line with one of the objectives set in the National Cooperative Policy 2011-2020, the involvement in the high-value economic activities by the cooperatives, can generate more wealth, benefitting members and contribute to the achievement of national development goals. Thus, cooperatives also must be more creative and innovative to be able to compete with other players in today's competitive business world.

One way of achieving those objectives is through education. The members of the cooperative must be equipped with the knowledge, skills, abilities and others, so that they will be able to manage the cooperative professionally, diligently and prudently. The cooperatives *'need to exploit all of their available resources as means of achieving competitive advantage to firms and in turn, improve the performance of their organization'* (Nazlina et al., 2011). This is supported by the third core strategy in the National Cooperative Policy 2011-2020, to put a great focus in the training and development activities among the members and employees of the cooperative. The continuous learning will enable the cooperatives to keep abreast with the latest management techniques and technology in order to be competitive and innovative.

Besides that, the cooperative's product have to be more diversify and the services provided must be open beyond the scope of their members. The cooperatives need to utilize the ICT facilities in their daily operational and management processes. A continuous effort in research and development to enhance the quality and functionality of their products and services must be taken as a priority.

The government hopes the cooperatives will be able to contribute more to the country's Growth Domestic Product (GDP) by 5% in 2012 and 10% in 2020 (National Cooperative Policy 2011-2020). The success of cooperatives is very much dependent on their ability to be resilient in the volatility and roughness of the market. They need to be more "risk taker" and "adventurous" in searching for a new market opportunity. Changes in the economic, political and environment such as market liberalization process, the emergence of new technology, and the evolution of ICT, put a pressure on the cooperatives to strengthen their stability in the market and continuously be competitive. Does Angkatan Koperasi Kebangsaan Malaysia Berhad (ANGKASA) have the workforce which is highly competent, well trained, qualified and innovative to meet such challenges? Are they innovative enough to create new services or products that are needed by most consumers? Is the human resource practices and organizational climate in ANGKASA supporting the efforts to implement high performance work processes in order to achieve the above objectives?

Cooperatives in Malaysia have a strong and significant amount of resources either in the form of monetary, raw materials, work force, or expertise. ANGKASA as the apex cooperative in Malaysia needs to play a role as an advisor to these cooperatives on how to utilize all of these resources in the most productive, safest, and efficient manner. In an interview through a phone with the Head of Membership Unit of ANGKASA, Encik Mond Radif Md. Jali, as at July 2012, the number of cooperatives that have become members of ANGKASA is 4,791. Does ANGKASA have a qualified, resourceful, and well trained workforce to be an advisor or facilitator in selecting the best investment or business opportunities when needed by those cooperatives? As action speaks louder than words, ANGKASA needs to show to the members of its successful story of what it has been doing in order to gain cooperators' trust.

**Figure 2 : Cooperatives Growth, Membership, Share Capital, Asset Value and Turnover (2005-2009)**

| <i>Cooperatives Growth, Membership, Share Capital, Asset Value and Turnover (2005-2009)</i> |                        |                         |                                     |                          |                          |
|---------------------------------------------------------------------------------------------|------------------------|-------------------------|-------------------------------------|--------------------------|--------------------------|
| YEAR                                                                                        | NO.<br>OF.COOPERATIVES | MEMBERSHIP<br>(million) | SHARE<br>CAPITAL<br>(RM<br>billion) | ASSET<br>(RM<br>billion) | TURNOVER<br>(RM billion) |
| 2005                                                                                        | 4,771                  | 5.69                    | 6.85                                | 34.87                    | 4.60                     |
| 2006                                                                                        | 4,918                  | 5.87                    | 7.29                                | 37.47                    | 5.10                     |
| 2007                                                                                        | 5,170                  | 6.32                    | 7.79                                | 47.40                    | 6.10                     |
| 2008                                                                                        | 6,084                  | 6.51                    | 8.42                                | 55.73                    | 7.75                     |
| 2009                                                                                        | 7,215                  | 6.78                    | 8.97                                | 65.00                    | 8.92                     |

SOURCE: The National Cooperatives Policy 2011-2020 (Malaysia Cooperative Societies Commission)

Looking at Figure 2 above, it can be seen that the number of cooperatives and membership keep rising from year to year. This means that the cooperatives have been accepted by the society. In the year 2009 alone, the accumulated share capital by all cooperatives is RM8.97 billion, with an assets of RM65 billion. With such a huge amount of funds and resources available, ANGKASA must be able to help and guide those cooperatives to utilize these resources in an efficient manner especially a small and medium scale cooperatives.

While from the Figure 3 below, it can be seen that the business conducted by the cooperatives can be divided into several activities such as banking, credit or finance, agricultural, housing, industrialization, consumer, construction, transportation and services. It shows that this sector can go far and able to give huge profit should it be managed in a

professional way. Implementing a high performance work systems is one way to ensure these cooperatives able to achieve their mission and objectives in a high performance outcomes.

**Figure 3: General Statistic of Cooperatives By Activities As At 31 December 2009**

| General Statistic of Cooperatives By Activities As At 31 December 2009 |                   |              |                     |                            |                    |                       |
|------------------------------------------------------------------------|-------------------|--------------|---------------------|----------------------------|--------------------|-----------------------|
| NO                                                                     | ACTIVITY          | NO. OF COOPs | MEMBERSHIP (person) | SHARE CAPITAL (RM million) | ASSET (RM million) | TURNOVER (RM million) |
| 1                                                                      | BANKING           | 2            | 838,932             | 2,289.5                    | 51,251.5           | 4,338.1               |
| 2                                                                      | CREDIT/FINANCE    | 575          | 1,963,054           | 4,170.1                    | 7,180.1            | 1,367.6               |
| 3                                                                      | AGRICULTURAL      | 1,362        | 289,484             | 244.3                      | 1,256.1            | 613.9                 |
| 4                                                                      | HOUSING           | 107          | 89,182              | 133.4                      | 406.6              | 36.4                  |
| 5                                                                      | INDUSTRIALISATION | 117          | 17,634              | 5.2                        | 56.6               | 33.1                  |
| 6                                                                      | CONSUMER-adult    | 1,681        | 670,908             | 279.5                      | 1,127.5            | 791.9                 |
| 7                                                                      | CONSUMER-school   | 2,115        | 2,106,130           | 17.3                       | 177.7              | 195.1                 |
| 8                                                                      | CONSTRUCTION      | 117          | 62,171              | 14.4                       | 56.8               | 64.2                  |
| 9                                                                      | TRANSPORTATION    | 346          | 148,196             | 58.7                       | 250.2              | 512.2                 |
| 10                                                                     | SERVICES          | 793          | 598,084             | 1,753.3                    | 3,236.2            | 966.5                 |

SOURCE: The National Cooperatives Policy 2011-2020 (Malaysia Cooperative Societies Commission)

Perhaps because of its uninteresting nature of business, low level of income, or not a glamour industry to work with, most of the researches on the high-performance work systems have been widely done in the field of profit oriented businesses, big companies with high yearly turnover, but rarely in the world of non-profit organization or small business institutions, in this case cooperatives. Although cooperative businesses “have been responsible for many market innovations and corrections of market imperfections, little is

known about their impact as an economic sector” (Steven, Ann, Brent and Reka, 2009). According to them, no comprehensive set of national-level statistics had been compiled about U.S. cooperative businesses, their importance to the U.S. economy, or their impact on the lives and businesses of American citizens. In addition, it was also found out that most studies on human resource practices are discussed in the large organization and are less completely covered in small organization (Nazlina et al., 2011), inclusive the cooperatives.

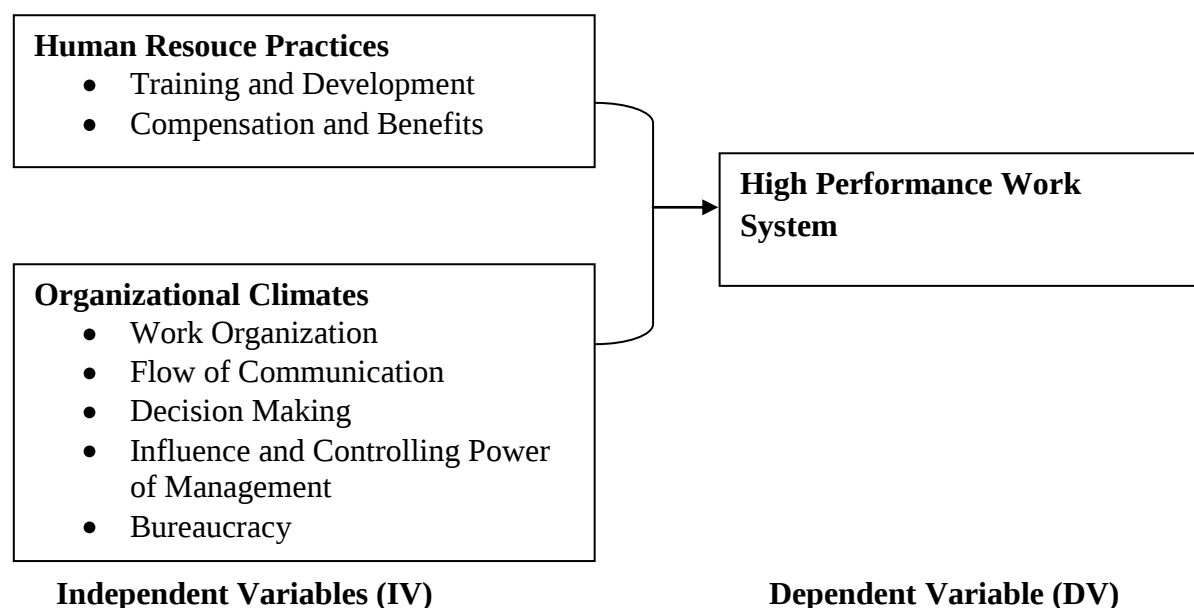
The lack of a supportive and committed organizational environment continues to be the most important barrier to a wider diffusion of high performance practices. Climate perceptions are seen as a critical determinant of individual behavior in organizations (Carr, Schmidt, Ford, Deshon and Richard 2003). Employees who are emotionally committed to their organization tend to put forth more effort in achieving organizational objectives (Rhoades & Eisenberger, 2002). Thus, is ANGKASA is practicing a supportive style of management or employee-friendly type of environment? Do the employees were invited to give their comments, ideas or suggestions in the policy making processes? Is ANGKASA transparent enough in the information sharing among all components in the organization?

As the high performance work systems see human capital as the main actor, thus the human resource department must play a more active roles in ensuring that the employees are well trained, qualified, and competent to perform the tasks assigned to the. At the same time, it has to be a strategic partner to other units in the organization. In every plan, human resource department has to get involved to make sure the business strategies or plans made are in line with the talents, skills, expertise, knowledge and experience possessed by the human capital in the organization. Thus, the human resource department can no longer performing their traditional functions of administrative tasks, but it has to change to play a role as a source of sustained competitive advantages in support of organization that operate in a worldwide economy (G. Ferris, Hochwarter, Buckley, Harrell-Cook, & Frink, 1999). As

ANGKASA is venturing into many new businesses, does the Unit of Human Resource of ANGKASA is implementing the high performance human resource processes in the areas of selection, incentive compensation program, promotional, work processes, and training and development? The unprecedented and interconnected changes in the economic, labour-market, public policy, and technological environments which have exerted tremendous pressures on organizations to become more efficient, flexible, and innovative, in order to respond effectively to changing markets and new technology (Pradeep, 2000) to ensure sustainability.

## 1.2 RESEARCH FRAMEWORK

In this study, two factors have been taken into consideration in considering the implementation of High Performance Work System in ANGKASA. They are Human Resource Practices and Organizational Climates.



Independent variables are those that are chosen and controlled by the researchers, in which the manipulation of the independent variables will cause an effect on the dependent variables. In this study, the independent variables are the (1) Human Resource Practices, with two dimensions which are the training and development and compensation and benefit and

(2) Organizational Climate with a dimensions which include the Work Organization, Flow of Communication, Decision Making, Influence and controlling power of management and bureaucracy. These two factors will be tested and analyzed to determine whether they have an influence on the high performance work systems or not. While, Dependent variables are the variable that can be influenced by other variables. In this study, the dependent variable is the high performance work system.

The sampling procedure used in this study was Simple Random Sampling method. It was chosen because of the high confidence level that every unit in the population, which is ANGKASA's employees has an equal chance of being selected as the sample. According to Sekaran (2003), simple random sampling has the least bias and offered the most generalization.

At the time of study, ANGKASA has 690 numbers of employees throughout Malaysia. According to Sekaran (2003), by assuming the Margin of Error is .05, the appropriate number of sample is 250 units.

This study is conducted by collecting the data about the employees' perceptions, opinions, and emotion through the distribution of questionnaire where the respondents were selected randomly without any fundamental criteria. The most actual and accurate data is needed to ensure the assessment of the situation will be as close as possible to the real situation. Research needs to focus on the actual processes experienced by workers, if we are to understand how HPWSs work to influence organizational outcomes and how they could work better ( Boxall and Macky, 2009).

The questionnaire used a Likert Scale with respondents indicating the degree of correspond. The questions were assessed on a seven-point scale, ranging from 1 represent extremely disagree to 7 which means extremely agree. The questionnaires were distributed to 450 employees from all level of employees in ANGKASA, and they were given a two weeks

to complete the questionnaire. Method of distribution was done through the email, by-hand, and by post. A total of 270 responses were received, giving a response rate of 60%. The valid responses were analysed using SPSS version 16.0

A structured questionnaire was developed, which consisting of four parts. **PART A**, of the questionnaire sought to determine the organizational climate of ANGKASA. Fourteen items were tested under this section. They are bureaucracy, rules and regulations, information sharing, the influence of groups on organizational decision making process, working methods, clearness of mission and objectives, communication, employees' charity, the openness of top management in accepting suggestions and ideas, and the influence of top management in the organization. **PART B**, aimed to ascertain and analysed the High Performance Work Practices that have been practiced in the organization. Among the issues that been looked into are the type of recruitment whether more to internal or external candidates, the frequency of performance evaluation, training and development programs, the openness and transparency of the organization in handling employees' grievances, types of test used in the selection processes, and compensation and benefits scheme. **PART C** is aimed at measuring respondent organization's human resource practices such as extensive training, empowerment, selective staffing, performance evaluation, and performance-based pay. The final part is **PART D**, is where the data about age, gender, race, level of education, period of employment and position were collected.

Although all the constructs under investigation were drawn from existing literature, a statistical procedure by SPSS was adopted to ensure its validity and reliability. Several test have been conducted to ensure the data collected are relevant and reliable to draw a conclusion about the issues been discussed such as reliability test, relationship ( $r$ ) analysis, factor analysis and many more. SPSS (Statistical Package for the Social Sciences) is a

predictive analytics software, specially developed for data analysis, statistical computing as well as data manipulation.

### **1.3 RESEARCH QUESTIONS**

The aims of this study are embodied in the following research questions:

- 1.3.1 Does the organizational climate has an relationship on the implementation of High Performance Work Systems in ANGKASA?
- 1.3.2 Does the human resource practices has an relationship on the implementation of High Performance Work Systems in ANGKASA?
- 1.3.3 Which of the independent variables have a greater relationship on the successfulness of the high performance work systems in ANGKASA?

### **1.4 RESEARCH OBJECTIVES**

- 1.4.1 To determine the level of High Performance Work Systems, Human Resource Practices and Organizational Climate.
- 1.4.2 To identify the correlation between Human Resource Practices and Organizational Climate and their impact on the High Performance Work Systems.
- 1.4.3 To investigate the relationship of Human Resources Practices and Organizational Climate toward the High Performance Work System.

### **1.5 SCOPE OF THE STUDY**

This study was conducted on the employee of ANGKASA, at all departments to evaluate the effectiveness of the work processes being used. As this study was done within a short period of time, thus there is a limitation to the results obtained as thorough and comprehensive evaluation was unable to be performed.

Angkatan Koperasi Kebangsaan Malaysia Berhad (Malaysian National Co-operative Movement), known as ANGKASA by most, was established and officially registered on 12 May 1971. The initial idea of the establishment was proposed by the Yang Mulia The Royal Professor Ungku A. Aziz. ANGKASA has been recognized by the government of Malaysia as an Apex Cooperative, which is responsible to ensure the consistent and continuous growth, and promote the development of cooperatives movement in Malaysia. It was also bestowed the powers by the members and cooperatives to be their voice, either domestically or internationally to the relevant authoritative bodies.

ANGKASA has made a brave leap by embarking into several incomesgenerated business activities in order to improve and stabilise its financial resources. If previously, ANGKASA is more focus on servicing its members through education program and consultancy services, but now, ANGKASA has spread its wings into the more challenging business territories such as the formation of Koperasi Perbankan Syariah ANGKASA Berhad (KOPSYA), Unit Perniagaan dan Subsidiari ANGKASA, and Perkhidmatan Potongan Gaji ANGKASA.

With these changes, it is important for ANGKASA to embrace to high performance work processes in its operational and management systems to ensure high performance in terms of financial, output, work systems, organizational climate, and Human Resources Practice and ability to fulfil members' needs and demands. The cooperative industry, while not seen as a great user of technology, nevertheless, is reliant upon fairly sophisticated computer equipment for rendering its services to its members as well as to other customers. Thus, it is about time, the high performance work systems is being implemented in ANGKASA to ensure its sustainability in the cooperative's world.

As a cooperative, ANGKASA has formulated several programs for the benefits of the cooperatives in Malaysia. To name a few are, Takaful Insurance Scheme, a collaboration with Etiqa Takaful Berhad to provide insurance coverage in the form of financial assistance should the insurer die, Lil-Waqf donation program which aims to provide an avenue for cooperatives to contribute some money to the society development activities as concept-based charity endowment, ANGKASA Education Loan Fund to all cooperative's members, children and staff for the following courses either full time , part time or distance learning at Bachelor, Master and Doctor of Philosophy at public or private Higher Education Institutions and many more. This list will never end as ANGKASA continues to search new services that it can offer to its members to make its existence relevant and significant to the cooperatives movement.

## **1.6 PROBLEMS AND LIMITATIONS**

There are some limitations faced during conducting and completing this research. The limitations are as follows.

### **1.6.1 Cost**

In the process of conducting this study, it had involved a great deal of costs. It is not only in terms of monetary, but also time, and energy. A great deal of efforts has been put on the data collection and analysis. Not to mention the cost to give some token to the employees who had answered the questionnaire as an appreciation. Other costs are like cost of printing, and distribution of questionnaires.

### **1.6.2 Time Constraint**

The time given to finish this study is limited for several months only. Due to this, the data collection, data analysis and search for the relevant literature reviews to supports the statements in this study is quite restricted to a certain perspective only. By taking this factor

into consideration, comprehensive opinions on the issue been discussed might be difficult to produce.

### **1.6.3 Information and Data**

The sample where the data were collected is relatively small that made the thorough and conclusive conclusion about the scenario becomes restricted to certain limit. The questionnaires were tested on a relatively small sample of employees; thus, their power to detect smaller effects was limited (Christopher & Kevin, 2003).

## **1.7 THE SIGNIFICANCE OF THE STUDY**

This study is significant to the development of cooperatives in Malaysia as it can be used as a reading material should they want to implement the high performance work systems in their institutions. As high performance work systems are striving for an efficient management of resources and risks to ensure the sustainability and competitiveness, history has proven of the collapsed of many enterprises because of the ignorance or failure to master this concept.

High performance work systems are not about the application of the high tech or sophisticated machinery or equipment in the work processes. It is about the management sensitiveness to the overall surrounding of the organization, from the position of the lowest end to the highest end, internal as well as external environment that give an effect to the organization. Undeniably, a supportive organizational climate and an employee-friendly human resource practices, will be able to contribute to the increment in the organizational performance.

It is a big hope that this study will contribute some advantages to several parties that have a part in the growth and development of cooperatives in Malaysia.

- **Cooperators**

By having this study, surely it will benefit the cooperators in a way of helping them to formulate a more efficient and effective methods of handling their resources in a more professional way and be able to produce a high performance outcomes.

- **Academically**

Most of the researches on the issue of high performance work systems were done to the big or medium size profit oriented enterprises. Very few studies have been conducted to the non-profit organization, or cooperatives. Hence, this study should be able to expand the boundary of research in this issue which is beneficial to the academicians or researchers should they want to acquire more information about the high performance works systems from the perspective of the cooperatives in Malaysia.

- **University**

This study will benefit the university as it will provide more exposure to the students who are interested to know more about cooperatives or who are searching data about cooperatives for the purpose of their study. Since, a copy of this project will be kept in the university's library for reference, it will add to the number of volume of research materials.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.0 INTRODUCTION**

This chapter presents related literature on High Performance Work Systems, Human Resource Practices, and Organizational Climate. The review of the literature is considered necessary in order to formulate the research model, hypotheses and methodology. The first section of this chapter will be concentrating on the definitions, and issues of conceptual, and the theoretical consideration which is literature review is explored.

#### **2.1 CONCEPTUAL DEFINITION OF HIGH PERFORMANCE WORK SYSTEMS**

This paper will begin by unpacking the meaning of High Performance Work System, Human Resource Practices and Organizational Climate respectively. There are so many definitions that have been proposed by the academician as well as practitioners in the industry, with the intention to make others understand more and have a clearer picture about the issue of High Performance Work System.

Bohlander & Snell (2004) has defined HWPS as “a specific combination of HR practices, work structures, and processes that maximizes employee knowledge, skill, commitment and flexibility”. While Nadler, Gerstein & Shaw (1992) says that the High Performance Work System is an organizational architecture that brings together work, people, technology and information in a manner that optimizes the congruence of fit among them in order to produce high performance in terms of the effective response to customer requirements and other environmental demands and opportunities. Huselid (1995) described High Performance Work Systems as the systems which include rigorous recruiting and selection protocols, performance management, and incentive compensation systems, and employee training and development activities that are designed to acquire, refine, and

reinforce employee skills and behaviors necessary to implement the firm's competitive strategy.

Unfortunately, there is no universal definition of performance (Anderse'n, 2010). Performance from process perspective involves the process of transformation from inputs to outputs in order to accomplish specific results, whereas, from an economic perspective, performance is focused on efficiency and effectiveness of the organization in managing their cost and outcome (Chien, 2004; Jarad, Yusof, & Shafiei, 2010). The definition of performance in the context of the cooperatives might be broader from the ordinary profit oriented business entity. For the cooperatives, apart from the above, they also have to ensure that part of the profit obtained must be used for the benefits of their members. Bartram, Robertson and Callinan (2002) have suggested four kinds of performance, which are the economic (productivity, profitability, etc.), technological (development of new products, etc.), commercial (market share, a specific niche, etc.), and social (effects on customers, suppliers and the public at large).

The High Performance Work Systems, sometimes known as high involvement or high commitment organizations, are organizations that use a distinctive managerial approach that enables high performance through people (John, 2001). It includes rigorous staffing procedures, employee participation, job redesign, investments in training, and alternative approaches to compensation (skill-based pay and group incentive compensation), are widely believed to improve organizational performance through their impact on employees' competencies, discretionary authority, and motivation (Bailey 1993; Combs, Liu, Hall, and Ketchen 2006; Delaney and Huselid 1996; Huselid 1995; Pfeffer 1994). They signify a strategic approach to human resource development and utilization, emphasizing the need to develop a highly skilled, highly flexible, and highly motivated work force and a human resource management system that promotes creativity and initiative among employees

(Pradeep, 2000). In other words, it is an “ideas about how to obtain profit through people” (Pfeffer, 1998).

In assessing the high performance work systems, the research needs to focus on the actual processes experienced by workers, if we are to understand how HPWSs work to influence organisational outcomes and how they could work better (Peter and Keith, 2009). With the help of leaders who develop a clear vision, mission, and goals, HPWS workers are expected to respond in non-programmed ways to changing circumstances. Workers in HPWS have shed the mentality of agents; they have become owners in their outlook (John, 2001).

HPWS organizations use an approach that is fundamentally different from the traditional hierarchical or bureaucratic approach, otherwise known as the Control- Oriented Approach (Lawler, 1992). According to Lawler (1992) again, companies using the control-oriented approach, assume that work should be simplified, standardized, and specialised and that supervision and pay incentives should be used to motivate individuals to perform their task well. In addition, Lawler add-up, involvement-oriented organization, which nearly similar to the HPWS, should be structured so that individuals at the lowest level in the organization not only perform work but also are responsible for improving work methods and procedures, solving problems on the job, and coordinating their work with that of others. Employees also can and should be expected to operate without a controlling supervisor (Lawler, 1992). The main idea of High Performance Work Systems are to create an organization based on employee involvement, commitment and empowerment, not employee control (John, 2001).

The dimensions of high performance work systems:

To make it simpler, Bradley, Kevin and Dianne (1999) have segregated all the components of HPWS into five elements which are:

- (1) Self- managing work teams,
- (2) Employee involvement, participation, and empowerment,
- (3) Total quality management,
- (4) Integrated production technologies, and
- (5) The learning organization.

Jayanth, Cornelia & Shawneek (1999), have outlined the dimensions of HPWS for improving the performance of the organization. They are (1) top management commitment (2) communication of goals (3) employee Training (4) cross functional teams (5) cross training (6) employee autonomy (7) employee impact (8) broad jobs (9) open organizations, and (10) effective labor management relations.

In addition, Evans and Davis (2005) argue that work practices such as selective staffing, self-managed teams, decentralized decision making, extensive training, flexible job assignments, open communication, and performance-contingent compensation.

## **2.2 CONCEPTUAL DEFINITION OF HUMAN RESOURCE PRACTICES**

The human resource practices can be defined as a philosophy, policy, system and practices that can affect the behavior, attitudes and performance of employees (Noe, Hollenbeck, Gerhart, & Wright (2010). The Human Resource practices can also be referred to as, the process of managing human talent to achieve an organization's objectives (Snell & Bohlander, 2007).

Human Resource systems involve two broad types of practices- work practices and employment practices. Work practices are to do with the way the work itself is organised, including its normal structured (e.g. Taylorised jobs, supervised group work, self-managing teams, highly autonomous professional jobs) and any associated opportunities to engage in problem solving and change management regarding work processes (such as quality circles and team meetings). While, employment practices include all the practices used to recruit, deploy, motivate, consult, negotiate with, develop and retain employees, and to terminate the employment relationship (Whitfield and Poole, 1997; Godard, 2004).

The implementation of High Performance Work Human Resource practices can be seen as a strategic approach taken by the Human Resource Department to make human resource as a business partner in the organization by adopting a more critical role in ensuring the competitiveness and successfulness of the organization. It “demonstrates the importance of HRM practices for organizational performance” (Delery and Doty, 1996). According to the resource-based view, firms with superior resources will be able to conceive of and implement unique strategies that rivals will find it difficult to emulate (Barney,1991). Since the competitors will enable to imitate the advantage of physical and financial resources, practitioners and researchers have shifted to the uniqueness of human resources as factors that could lead to sustainable competitive advantage of the firm (Barney, 1991; Barney, Wright, & David, 2001).

Human Resource Management systems provide additional value when they are purposively designed to be internally consistent and are thereafter linked with firm competitive strategy (Butler, Ferris, & Napier, 1991; Cappelli & Singh, 1992; Jackson & Schuler, 1995; Milgrom & Roberts, 1995; Ulrich & Lake, 1990; Wright & MacMahan, 1992). The behavioral perspective (Jackson, Schuler, & Rivero, 1987) suggests that an effective HR management system will acquire, develop, and motivate the behaviours

necessary to enhance firm performance (Bailey, 1993; Jackson et al., 1987; Pfeffer, 1994; Schuler & MacMillan, 1984).

HR strategies that successfully develop and implement a coordinated HPWS create “invisible assets” (Itami,1987) that both create value and are difficult to imitate. According to “Resource- Based” view of the firm (Barney,1991) it is clear that if these HR management systems are to in fact create sustained competitive advantage, they must be difficult to imitate.

Christopher & Kevin (2003) suggest that specific, targeted HR practices may be more effective than general practices. The appropriateness of a set of HR practices may depend on the competency that a firm is trying to develop (Snell, Youndt and Wright,1996). Thus, it is important to identify a set of HR practices that firms can use to systematically develop. These findings suggest that firms should use specific sets of HR practices if they are trying to develop and reinforce a particular employee-based resource or competency (Christopher et al.,2003).

The key dimensions of high performance Human Resource practices have been clearly identified by Pfeffer (1988) in “The Human Equation”, which are as follows, (1) employment security (2) selective hiring of new personnel (3) self-managed teams and decentralization of decision making as the basic principles of organizational design (4) comparatively high compensation contingent on organizational performance (5) extensive training (6) reduced status distinctions and barriers, including dress, language, office arrangements, and wage differences across levels and (7) extensive sharing of financial and performance information throughout the organization.

Another dimensions as suggested by (Nazlina et al., 2011), activities of HRM include HR planning, staffing, training and development, performance management, compensation management, safety and health and employee relations.

## **2.3 CONCEPTUAL DEFINITION OF ORGANIZATIONAL CLIMATE**

The meaning of organizational climate has been explained by Schneider (1975) where he has defined organizational climate as a mutually agreed internal (or molar) environmental description of an organization's practices and procedures. In addition, Shadur, Mark, Kienzle, Rene, and Rodwell (1999) agree that organizational climate refers to a systematic phenomenon that pervades an organization and its parts and influences an individual's performance on the job.

Although the research studies on organizational climate have used slightly different definitions and measure of climate, they all seem to agree that climate refers to a systematic phenomenon that pervades an organization and its parts and influences an individual's performance on the job (Shadur, Mark, Kienzle, Rene, and Rodwell, 1999).

According to Gerhart & Milkovich (1990), in the case of organization's climate, whether it is supportive or not, is determined solely by an employee's perceptions of the work climate. Climate perceptions are seen as a critical determinant of individual behaviour in organisations (Carr et al., 2003). Schneider & Hall (1972) note that climate perceptions emerge as a result of the employee's numerous activities, interactions, and other daily experiences with his or her organization. Perceived climate may be related to a number of outcome variables such as individual job satisfaction, involvement in the job, and effort. Thus, it can be said that organizational climate does influence effort and job satisfaction, or day-to-day job experiences (Schneider and Hall, 1972).

Climate has variously been conceptualised as an individual attribute (Wallace, Hunt, Richards, 1999) measurable by a multi-trait matrix (Schneider and Bartlett, 1970), a sub-

system phenomenon (Powell and Butterfield, 1978), and an organisational entity (Campbell, Dunnette, Lawler & Weick, 1970).

It is held to be a summary perception of how an organisation deals with its members and environments, and thus develops specifically from internal factors primarily under managerial influence (Ostroff and Schmitt, 1993).

Jones and James (1979) derived six dimensions of climate:

- (1) leadership facilitation and support;
- (2) workgroup co-operation, friendliness and warmth;
- (3) conflict and ambiguity;
- (4) professional and organisational esprit;
- (5) job challenge, importance and variety; and
- (6) mutual trust.

Rhoades and Eisenberger (2002) and Payne and Pugh (1976), they suggest that organizational climate includes, among other things, attitudes, feelings, values, norms, interactions, and satisfactions. In addition, Lichtman (2007) say that climate consists of perceived factors, such as the opportunities to develop, grow, advance, a challenging job, etc.

Another theorist, Moran and Volkwein (1992) have proposed that organizational climate is a relatively enduring characteristics of an organization which distinguishes it from other organizations: (a) and embodies members collective perceptions about their organization with respect to such dimensions as autonomy, trust, cohesiveness, support, recognition, innovation, and fairness; (b) is produced by member recognition; (c) serves as a basis for interpreting the situations; (d) reflects the prevalent norms, values, and attitudes of the organizations culture; and (e) acts as a source of influence for shaping behavior.

While, Jones and James (1979), say that the dimensions of organizational climate consists of (1) conflict and ambiguity, (2) job challenge, importance and variety, (3) leader facilitation and support, (4) workgroup cooperation, friendliness and warmth (5) professional and organisational esprit, and (6) job standards.

## **2.4 THE ROLES OF HUMAN RESOURCE PRACTICES AND ORGANIZATIONAL CLIMATE IN THE IMPLEMENTATION OF HIGH PERFORMANCE WORK SYSTEMS**

Previous research on Human Resource Management widely accepted that employees create an important source of competitive advantage for the firms (Barney, 1991; Pfeffer, 1994). The importance of human resource functions in the organization is further enhanced by the (Raduan & Naresh, 2006), firms may have the capital and technology, but it is Human Resources (HR) that will help firms face the challenges of business globalization.

The emphasize on the high performance human resource practices has increasingly gaining serious attention from the policy maker in the organization “because management is making a major investment in advanced technology in the workplace” (Wall, Jackson & Davids, 1992) in order to ensure organizational competitiveness, sustainability, and being ahead from its competitors in a globalised market.

Maimunah, Lawrence & Maran (2009) say “that in current global market, companies are composed by competitors, regardless of industry. To develop a competitive advantage, it is important that firms truly leverage on the workforce as a competitive weapon. Firms seek to optimize their workforce through comprehensive human capital development programmes not only to achieve business goals but most important is for a long term survival and sustainability”.

Some empirical studies have support the hypothesis that firms, which align their HRM practices with their business strategy, will achieve superior outcomes (Bac & Lawler, 1999). The “superior outcomes” as mentioned by them can be referred to as High Performance Work Systems.

Human Resource Management systems provide additional value when they are purposively designed to be internally consistent and are thereafter linked with firm competitive strategy (Butler, Ferris, & Napier, 1991; Cappelli & Singh, 1992; Jackson & Schuler, 1995; Milgrom & Roberts, 1995; Ulrich & Lake, 1990; Wright & MacMahan, 1992). The behavioral perspective (Jackson, Schuler, & Rivero, 1987) suggests that an effective HR management system will acquire, develop, and motivate the behaviours necessary to enhance firm performance (Bailey, 1993; Jackson et al., 1987; Pfeffer, 1994; Schuler & MacMillan, 1984).

The role of HR practices then is to help a firm attract and develop employee capability (e.g. through selective hiring, developmental performance appraisal, and comprehensive training) (Macky and Boxall, 2007).

HR practices may also elicit organizationally desirable behaviour by providing both the opportunity and motivation for discretionary effort. This includes HR practices that seek directly to modify performance behaviour, such as pay-for-performance, as well as high-involvement practices that seek to motivate by providing employees with an opportunity to exercise voice and influence over their work (Lawler, Mohrman and Ledford, 1998).

HR practices may also aid employee retention by building commitment to their employing organizations thereby retaining human capital as well as improving productivity by reducing dysfunctional employee turnover (McElroy, Morrow and Rude (2001); Shaw, Gupta and Delery (2005)).

According to Lichtman (2007), *“if the individual perceives that the organizational climate in which he or she is working is supportive in terms of the opportunities for growth, advancement, challenge, etc., then this will result in an increase in the individual’s effort on the job and feelings of job satisfaction. On the other hand, if the individual perceives that the climate is not supportive in terms of the previously mentioned factors, then this will result in a decrease in the individual’s performance and feelings of job satisfaction. In other words, how people perceive their organization in terms of climate is important in terms of how they feel about their jobs and how much effort they expend to perform their jobs”*.

There seems a clear theoretical basis for presupposing that HR practices included under the HPWS rubric can serve to modify employee behaviour, and the context within which that behaviour occurs, in ways that enhance employee performance (Macky and Boxall, 2007).

## **2.5 LIMITATIONS OF HIGH PERFORMANCE WORK SYSTEM PRACTICES**

Despite positive evidence for the effectiveness of high performance work systems, studies to date indicate that the adoption of these types of practices is somewhat limited and sporadic (Godard, 2004; Roche, 1999). Although, in theory, HPWSs can provide win-win benefits for firms and employees (Machin and Wood, 2005) but can also generate win-lose combinations and even lose-lose outcomes (Boxall and Purcell, 2003).

In many literatures, high performance work systems have been defined in simple terms, the actual design and implementation of an HPWS is not quite as simple. The design of an HPWS is not something that can be easily modelled and recreated within different organizations; each organization will come out of the design process with a unique system that works for that organization (Brown, 2006). The organizations *“should try the design,*

*closely observe how it works in practice. Identify what works and what doesn't, and then make the appropriate adjustments"*(Nadler, D.A., Nadler, M.B., & Tushman (1997).

While a large body of research has demonstrated the positive impact of high-performance practices on the financial performance of organizations, the impact on the well-being of workers is less well known. But the limited evidence that is available suggests that productivity gains have come at the expense of workers and that the adoption of high-performance practices has been accompanied by a deterioration in the quality of work environment is a fundamental problem for the sustainability of high-performance systems ( Pradeep, 2000).

According to (Boxall, & Macky, 2007), “using a randomly selected national population sample, clear evidence was found for a positive relationship between HPWS practices and the attitudinal variables of job satisfaction, trust in management, and organizational commitment, implying that HPWS can provide win-win outcomes for employees and employers. However, the study also tests-from an employee perspective – the complementarities thesis- and finds negative interaction effects among HPWS practices.

Cappelli and David (2001), for example, fail to find significant interaction effects, with the possible exception of a synergy for profit-sharing with self-managed teams, while Godard (2001) finds a plateau effect in HPWS adoption. In the latter case, Canadian firms with low to moderate HPWS adoption gained the most compared to those with high adoption levels, suggesting a case of “diminishing returns at higher levels of adoption, rather than the increasing returns predicted by the complementarities thesis” (Godard, 2004:354) cited in Boxall & Macky (2007).

Guest, Conway and Dewe (2004) also found little evidence for meaningful interaction terms between HR practices in relation to the organizational outcomes of performance, innovation, employment relations and labour turnover.

Appelbaum, Bailey, Berg & Kalleberg (2000) also found no evidence for interaction effects on employee attitudes and concluded that ‘although theory suggest that system effects are likely to be important in the analysis of plant performance, there is no basis for this expectation in the analysis of worker outcomes’.

In the striving of the high performance outcomes in the organization, the reactions or employees’ feeling in the implementation of the system has been neglected. According to (Grant and Shields, 2002; Guest, 1999, 2002; Ramsay, Scholarios & Harley 2000), while employees may be placed as central to mediating the impact HPWSs have on organizational performance, their reactions to such practices have been rather neglected in the HPWS research to date.

In a unionized company, unions may materially influence members’ attitudes and behaviors towards management innovations (Turner, 1991). As Godard (2004) pointed out, some have argued that the adoption of HPWSs is antithetical to the interests of unions (Huselid and Rau, 1997; Kelly, 1996).

As noted by Kizilos and Reshef (1997), in unionized settings, union leaders will likely influence the extent to which HR innovations are successful or unsuccessfully implemented. Ortiz (1999) found that unions in the U.K. subsidiaries of a U.S. multinational corporation resisted the introduction of team-working because it challenged their core interest in the control of work organization.

## **2.6 IMPACT OF HIGH PERFORMANCE WORK SYSTEMS TO BUSINESSES**

In terms of HPWSs, however, most researchers have focused on economic performance criteria, as Godard’s (2004) evaluation of HPWS studies indicates. This means that HPWSs, to be deemed successful, need primarily to enhance cost-effectiveness. If the

financial benefits do not exceed the costs, then the HPWSs are not economically rational for firms (Peter and Keith, 2009)

The common thread is that achieving and sustaining high levels of performance requires a positive workplace environment and practices that develop and leverage employees' knowledge and ability to create value (Eileen, Jody and Carrie, 2011).

While the specific practices need to be tailored to fit different industries and occupations, they generally include selection, training, mentoring, incentives, knowledge-sharing, partnership-based labor management relations and other shared decision making mechanisms (Horgan and Muhlau , 2006).

These practices are most effective when they are implemented together and in concert with new capital or technological investment (MacDuffie (1995); Dunlop and Weil (1996); Ichniowski, Shaw and Prennushi (1997); Bratt (1999); Appelbaum, Bailey, Berg and Kalleberg (2000)).

Researchers have documented the impact of high-performance work practices on efficiency outcomes such as worker productivity and equipment reliability (Youndt, Snell, Dean, Lepak (1996); Ichniowski, Shaw and Prennushi (1997), on quality outcomes such as manufacturing quality (MacDuffie (1995), customer service, and patient mortality (West, Borrill, Dawson, Scully, Carter, et al. (2002), on financial performance and profitability (Huselid (1995); Delery and Doty (1996); Collins and Smith (2006)) and on a broad array of other performance outcomes (Appelbaum, Bailey, Berg and Kalleberg (2000); Bartel (2004); Wright and Gardner (2006)).

Although some studies have found mixed results regarding performance differences associated with these work practices (Cappelli, Neumark (2001), many other studies have found that these work practices explain significant performance differences among auto

assembly and parts plants, steel mills and finishing lines (Ichniowski, Shaw and Prennushi (1997), call centers (Batt (1999), airlines (Gittell (2003), banks (Richard and Johnson (2004), health care clinics and hospitals ( Gittell, Seidner and Wimbush (2009), and high technology firms (Cutcher-Gershenfeld (1991); Collins and Clark (2003). The magnitude of the effects is substantial, with performance premiums ranging between 15 percent and 30 percent (Eileen, Jody and Carrie, 2011).

High-performance work practices can be shown to work from three different perspectives:

- (1) Fostering development of human capital, creating a performance advantage for organizations through processes such as increased employee skill development and improved customization by employees in service industries (Gibbert (2006); Fried and Hisrich (1994); MacMillan, Zemmann and Subbanarasimha (1987); Snell and Dean (1992); Batt (2002)).
- (2) Enhancing the motivation and commitment of employees, creating an organizational and labor-management climate that motivates and support employee engagement in problem solving and performance improvement (Osterman (1988); Mahoney and Watson (1993); Tsui, Pearce, Porter and Hite (1995); Appelbaum, Bailey, Berg and Kalleberg (2000)).
- (3) Building organizational social capital, which facilitates knowledge sharing and the coordination of work, and thus improve performance (Nahapiet and Ghoshal (1998); Tsai and Ghoshal (1998); Leana and Van Buren (1999); Levin and Cross (2004); Gittell (2000); Gittell, Seidner and Wimbush (2009)). Research in settings ranging from public schools to airlines has demonstrated the added benefits to be realized when work practices encourage the simultaneous development of human

capital and social capital among employees (Leana and Pil (2006); Gittell (2000); Pil and Leana (2009); Gittell (2009)).

A combination of formal and informal mechanisms for employee voice has been found to improve the productivity effects associated with implementing high-performance work practices compared to implementing the same practices with just informal voice mechanisms or no employee voice (Black and Lynch (2004); Coats (1999)).

When combined with union representation, these work systems tend to be associated with higher wages, some of which are achieved through mutual gain-sharing or similar compensation practices (Appelbaum et al. (2000); Kochan, Eaton, McKersie, and Adler (2009)).

Vandenberg, Richardson and Eastman (1999) found that high-involvement work practices had both a direct positive influence on voluntary employee turnover and organizational return on equity, and an indirect one via improved employee job satisfaction and organizational commitment. Using an index of high-commitment HR practices, Guest (1999) found that employees who reported experiencing higher numbers of these practices reported higher job satisfaction.

Management's adoption of high-performance work practices should lead to increased trust to the extent that such actions are seen by employees as demonstrating managerial competence, reduce their perceptions of vulnerability or threat, and are otherwise seen to be in the worker's interest (Macky and Boxall, 2007).

## **2.7 PREVIOUS RESEARCH FINDINGS**

Guthrie's(2001) survey of 164 New Zealand firms which shows that when firms pursue high-involvement work practices, lower employee turnover is consistent with higher

productivity. Conversely, when firms pursue more control-oriented forms of work organisation, higher employee turnover is consistent with higher productivity. In other words, firms which decide to make the costly investment in high-involvement work processes, and the related skills, will have better economic performance in conditions of low labour turnover (Boxall and Macky, 2009).

Huselid (1995), using survey data from 968 firms in many industries has found evidence consistent with the hypothesis that companies' use of systems of high performance work practices (1) diminishes their employee turnover and (2) increases their productivity (sales per employee) and corporate financial performance (stock market value to book value).

MacDuffie (1995) studied the relationship between "bundles" of interrelated and internally consistent human resource practices (not individual practices) and productivity and quality in 62 auto assembly plants throughout the world using questionnaires and site visits. Some plants used HR bundles associated with mass production involving a narrow division of labor and low commitment policies. Some plants were in between. He founds strong, statistically significant evidence supporting the hypothesis that innovative bundles of HR practices are positively related to both productivity and quality.

Ichniowski, Shaw and Prennushi (1997), where they studied 36 homogeneous steel finishing lines owned by 17 companies to determine whether clusters of complementary HRM practices are related to productivity. Productivity was measured by the percentage of uptime (time not involving delays). The evidence from their careful regression analyses, which control for all relevant differences in the production lines indicates that systems of innovative HRM practices have a statistically significant large and positive association with workers' productivity, while changes in individual HRM practices have little or no effect.

Ichniowski and Shaw (1999) examined evidence on the performance difference between Japanese and US steel manufacturing companies. The Japanese companies utilized HRM systems featuring problem-solving teams, employment security, flexible job assignments, training, careful employee selection, and high levels of labor-management communication. The US companies, had lower levels of HRM systems, from traditional to innovative. The regression analyses indicated that the Japanese steel companies performed better in both productivity and product quality than the US companies. The US companies that utilized innovative HRM systems equalled the productivity and came close to the quality performance of the Japanese companies.

In a telephone survey of 775 New Zealand full-time employees, Macky and Boxall (2008) find that greater experience of high involvement work processes is associated with higher job satisfaction. Macky and Boxall's (2008) findings parallel those of Bauer (2004), whose analysis of the European Survey on Working Conditions 2000 shows that workers particularly value improvements in autonomy and communication rather than practices such as teamwork and job rotation *per se*. Godard (2001), his key finding is that while modest levels of 'high-performance' may benefit employees, high levels become stressful.

Lunenburg's research (Lunenburg, 1983), demonstrated that students' perceptions of humanistic school climate related in a positive manner to their personal motivation, task orientation, problem solving, and attitude toward learning.

## **2.8 HYPOTHESES OF THE STUDY**

H1: There is a relationship between Human Resource Practices in the successfulness of the implementation of High Performance Work System in Angkasa.

H2: There is a relationship between Organizational Climate in the successfulness of the implementation of High Performance Work Systems in Angkasa.

## **2.9 CONCLUSION**

Based on the conceptual definitions and dimensions of the variables, and discussion of the impacts and supports from the previous researches, the researcher has showed the significant of high performance work systems in ensuring the competitiveness and sustainability of the organization. The next chapters will do more exploration regarding this issue and discussion will be made to answer the hypotheses of the study.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.0 INTRODUCTION**

This chapter presents a description of the research design and methodology used in this study. It also provides an overview of the research study, a description of the instrument selected for data gathering, the population and sample as well as the survey procedures used.

Research methodology can be in the form of (1) quantitative or (2) qualitative. Quantitative type of research method is used when the researcher measuring the number of times a person does something under a certain circumstances. While qualitative is used when the researcher is making a verbal interview to ascertain the feeling of the respondent about certain issue or circumstances. Neither one is better than the other, despite, a comprehensive research normally will incorporate both of these methods in their research in order to get a better results, although, in a normal condition, this is not always possible due to time and financial constraints.

### **3.1 RESEARCH DESIGN**

The study was conducted by using the quantitative method. According to Robert, Brian & Sekaran(2001), a quantitative study is a research method which involve the analysis of data or information that are descriptive in nature and usually not qualified. The respondents of the study were the employees of ANGKASA where the distribution of questionnaires was by using the simple random sampling. The data collected was solely through the questionnaire. No interview with the personnel of ANGKASA has been done. After the data was gathered, the analysis is done to achieve the research objectives.

In this study, two independent variables have been selected for this study, namely (1) human resource practices and (2) organizational climate. The dimensions under the human resource practices training and development as well as compensation and benefit. While the dimensions for the organizational climate are the work organization, flow of Communication, decision making process, influence and controlling power of management, and bureaucracy. These dimensions were selected because they have previously identified as those likely to have the greatest impact on the organizational performance. There is no fix number of dimensions to use, but it all depends on what the researcher tries to find out from the study conducted. For example, Youndt, Snell, Dean and Lepak (1996) in his summary of best HRM practices offered a very comprehensive list of diverse HRM practices used by various studies, Delery and Doty (1996), Delaney and Huselid (1996) and Way (2002) used seven of different practices, Wang and Zhang (2005) applied ten practices and Theriou and Chatzoglou (2008) utilized nine practices in their study. Although only two independent variables were used in this study, but the researcher in the opinion that the dimensions chosen for these two variables are adequate enough to answer all research questions, accurately and precisely.

In a quantitative study, the aim is to determine the correlation between one variable (independent) and another variable (dependent) in a population. Quantitative research

designs can be in the form of (1) descriptive or (2) experimental. In the case of this study, a descriptive approach will be used, thus subjects will only be measured once with an intention to establish association between the two types of variables.

For an accurate estimation of the relationship between variables, about 450 questionnaires had been distributed to the employees of ANGKASA. They were given two weeks for them to answer the questionnaire. Currently, ANGKASA has about 690 numbers of employees. Based on Sekaran (2003), the amount of sample that is considered sufficient to construct a concrete conclusion for the relationship is 249 numbers of employees. The researcher has able to collect 261 samples out of 450 questionnaires distributed which constituted a percentage of 58%. The basic rule is that, the estimate of the relationship is less likely to be biased if the researcher is able to collect a higher participation rate in a sample selected randomly from a population (Will, 2000).

This study is a quantitative type of research where the statistical analysis such as regression analysis will be used to determine the empirical relationship between the independent variables and dependent variables. Been a cross sectional in characteristic, the data collected will be analysed and statistically concluded only for once.

### **3.2 LOCATION OF THE STUDY**

The study was conducted to the employees of the Angkatan Koperasi Kebangsaan Malaysia Berhad (ANGKASA) where the distribution of questionnaires were done randomly irrespective of their age, gender, units or departments that they are working, and years of working.

As explained in chapter one, ANGKASA has 690 number of employees throughout Malaysia. It has several divisions that consist of (1) Administration, (2) Division of 4P, (3) Division of Social Services and Affairs, (4) Finance Department, (5) Credit and Banking

Services, (6) Unit of Coop's Business Development and Entrepreneurship, (7) Corporate Communication, (8) Audit and Risk Management, (9) Unit of ANGKASA's Businesses and Subsidiaries.

In this cross-sectional study, the strength of the influential forces that those two independent variables have on the High Performance Work Systems in Angkasa is ascertained. In doing so, several items have been tested such as employee-employer relationship, autonomy, level of employee involvement, information sharing, and rewards and compensation scheme, and many more. What we are looking for in this survey is how conducive the organizational climate in ANGKASA to promote the practices of HWPS among its employees, as well as whether the human resource practices implemented is encouraging or motivating employees to perform better, happily and competently.

### **3.3 POPULATION AND SAMPLING PROCEDURE**

Population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate, while sample is a subset of the population (Uma and Roger, 2009).

The survey was done to the employees of ANGKASA. In the initial part of the study, a pilot test was conducted, where 100 questionnaires were distributed to the employees of ANGKASA. The basis for distribution is simple random sampling where all employees have an equal chance of being selected in the survey. Out of 100, 50 questionnaires were successfully collected in the pilot test. After the researcher was confident that the questionnaire of the study is able to measure the items been tested and able to collect data needed to answer the research questions through the reliability analysis where all the Cronbach's Alpha calculated are 0.70 and above, only then 450 questionnaires was distributed to the employees for the real survey. In this distribution, out of 450 questionnaires

distributed, 261 respondents had returned the questionnaire to the researcher, which has meet the criteria suggested by Krejcie, Robert, Morgan, Daryle (1970), suggested a guidelines for sample size decision so as to ensure precision and confidence in determining the sample size.

The population of this study was the employees of Angkatan Koperasi Kebangsaan Malaysia Berhad (ANGKASA). Out of 690 employees, 450 employees have been identified and were given a questionnaire for them to answer. Out of 400 selected respondents, only 261 employees returned the questionnaire to be analysed.

The sampling method used is probability sampling (simple random-sampling). This method was chosen because of the equal chance that the population being selected as a subject. Probability sampling: it is the one in which each sample has the same probability of being chosen. (Paula and Justo, 2001).

According to Uma (2009), sampling design and sampling size are very important. That is, if data collected from people, events, or objects that cannot provide the correct answers to solve the problem, the survey will be in vain. A proper sampling design and size helps the researcher to draw conclusions that would be generalized to the population of interest.

### **3.4 DESIGN OF QUESTIONNAIRE**

The questionnaire is one of the main tools for collecting data from the respondents. The types and design of questionnaire that were used depend on the studies that the researcher wants to carry out.

According to (Uma and Roger, 2009), a questionnaire is a pre-formulated written set of questions to which respondents record their answers, usually within rather closely defined

alternatives. They add that, questionnaires are an efficient data collection mechanism when the researcher knows exactly what is required and how to measure the variables of interest.

Getting the question right is the most important step because a poorly focused questions lead to unclear decisions about what research to include and how to summarise it (Higgins and Green, 2005). The questions constructed in the questionnaire for this study were derived from the combination of several researches done by the previous researchers. The focus is to identify the scope of question, the depth of the particular question to answer the research questions and example of sentence for questionnaire construction. The questionnaire on the organizational climate was taken from a combination of two sources, which are from the previous research conducted by BERNAS to its employees to measure their perception on BERNAS organizational climate in 1980 and was taken from James and Jones (1976) where they have developed the items for their questionnaire after an extensive review of the literature. From the literature they identified 35 concepts related to organisational climate. Eleven concepts related to job and role characteristics, eight related to leadership characteristics, four to work-group characteristics and twelve comprised sub-system and organizational level characteristics. While the framework of the questionnaire for human resource practices was formed by referring to several studies conducted by the previous researches, which among them are the study conducted by Khurram, Sajid and Muhammad (2008) where they conducted a study on the impact of human resource practices on perceived performance of university teachers in Pakistan. Among the items that have been identified from this source are employee's feeling about their work, good communication with supervisor, supportive supervisor and co-workers, ability to balance between work life and home life, being recognized when good job was performed, clear expectation from the employer or superior, training to do the work, company policy and procedure, salary, and benefits. For the high performance work systems, the items of survey in the study done by

Delaney, Lewin, and Ichniowski (1989) have also been analysed. The questionnaire constructed by them covered the area of personnel selection, performance appraisal, incentive compensation, job design, grievance procedures, information sharing, attitude assessment, and labor-management participation.

The respondent rated their level of agreement with each items on a seven-point respondent format as shown as Table 1 below.

**Table 1: Seven-Point Respondent Format**

| <b><u>Choices</u></b> | <b><u>Score</u></b> |
|-----------------------|---------------------|
| Strongly disagree     | 1                   |
| Moderately disagree   | 2                   |
| Slightly disagree     | 3                   |
| Neutral               | 4                   |
| Slightly agree        | 5                   |
| Moderately agree      | 6                   |
| Strongly agree        | 7                   |

### **3.4.1 VARIABLES AND MEASURES**

In this study questionnaire was distributed to respondents in Malay version (Bahasa Malaysia). A total of 62 questions contain in the questionnaire which is divided into four sections respectively which is section A, Section B, Section C and Section D. On every

section of the questionnaires has its own instruction and guideline to the respondent. A seven-point respondent format have been used for section A, B, C since it provides a finer level of detail and does not place undue cognitive burden on the respondent (Lissitz and Green, 1972; Miller, 1956; Preston and Colman, 2000). In addition seven appears to be optimal for information processing purposes and scale reliability (Churchill and Peter, 1984; Green & Rao, 1970). Demographic information for section D fundamentally considered as nominal (Devellis, 2003; Nunnally, 1959; Nunnally and Bernstein, 1994; Roberts, 1994; Suppes and Zinnes, 1963).

### **3.4.2 INTERPRETATION OF VARIABLES**

**Section A** cover the area of organizational climate. It measures the agreeable level of employees to the organizational climate of ANGKASA. This section contains 17 questions. **Section B** is about the high performance work systems. This section measure the practices been used in the organization which particularly relate to the area of training and development, and compensation and benefits. It comprises of 13 questions. **Section C** handles the issue of human resource practices. This section measures the issues such as staff selection, promotion, and strategic human resource practices. This section consists of 26 questions. **Section D** is about the background of the respondent. The last section of the questionnaire requires information about personal and demographic data of respondent. Questions consists of gender, race, educational level, age, year of working and position hold in the organization.

### **3.5 DATA COLLECTION METHOD**

Data gathering is an important process in this study. There are several methods in data collection such as primary and secondary data collection. Primary data is gathered and observed directly from first-hand experience, which in this case by using a questionnaire. In

this research, the researcher also used secondary data to gather some of information through external sources such as units or departments in ANGKASA itself.

The questionnaire is used as the main instrument to collect data from the respondents. The advantage of using questionnaire includes the relatively low cost, no interview bias, no prior arrangements are needed and the facts of anonymity among respondents (Schermerhorn, Hunt & Osborn, 2000). The distribution of the questionnaire is to the employees of ANGKASA irrespective of their job positions, gender, years of working. The researcher has explained the purpose of the study to the respondents. The researcher distributed the questionnaire to the target respondents and they were given one week to complete it. Some of them have posted the questionnaire to the researcher by mail, and some had been collected by the researcher by hand.

### **3.6 PILOT TEST**

A pilot test is a scientific type investigation in terms of a newly developed test's validity and reliability in regards to its intended purpose. The process of conducting a pilot test involves administering the test to a small group of the test's target audience and then evaluating the information that is obtained from the pilot test. The test developers are then required to make any necessary revisions to the new test and therefore are responsible for fixing any problems that exist with the test performance as discovered from conducting the pilot test (McIntire & Miller, 2007).

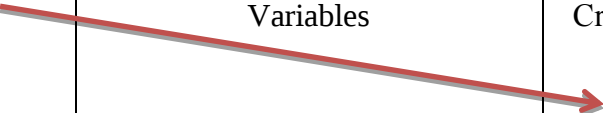
In this pilot test, 50 respondents have been selected to be in the pilot test. The purpose of the pilot test as mentioned earlier is to test the reliability of the questionnaire. Due to the fact that the purpose of the pilot test is to determine how well the new test performs, it is essential that the pilot test be administered in a similar situation to the one that the test will actually be utilized in. Because of this, the researcher needs to choose a group of people who

closely resemble or are even directly part of the target audience that the test will be used for. When conducting a pilot test, the test the researcher needs to make sure that the examinees fully understand that they are participating in a research study and therefore, that the results of the test will be used for research purposes only.

### 3.7 RELIABILITY ANALYSIS OF THE SAMPLES

The reliability of the questionnaire was tested using Cronbach's Alpha to show the internal consistency of the items been studies in the questionnaire. According to Sekaran (2003), the closer the reliability coefficient to 1.00, the better it would be. While if less than 0.60 is considered poor. Those in the range of over 0.8 are considered good and acceptable. From the reliability analysis made, a table as shown below will be obtained. The table show the values of Cronbach's Alpha of the variables been analysed. In this case, organizational climate, human resource practices and high performance work systems. The example of the table of Cronbach's Alpha is shown as below

**Table 2: The Example of Table of Cronbach's Alpha to Determine the Internal Consistency of the Data**



| Variables                     | Cronbach's Alpha | Cronbach's Alpha Based Standardised Items | N of Items |
|-------------------------------|------------------|-------------------------------------------|------------|
| Organizational Climate        | 0.654            | 0.645                                     | 14         |
| Human Resource Practices      | 0.899            | 0.890                                     | 26         |
| High Performance Work Systems | 0.780            | 0.812                                     | 13         |

### 3.8 DATA ANALYSIS

Data analysis is a body of methods that help to describe facts, detect patterns, develop explanations, and test hypotheses (Joel, 1996). Through data analysis, the researcher is able to inspect, clean, transform, and modelling the data collected with the goal of highlighting the useful information relates with the issues been investigated, suggesting conclusion and using the outcomes from the data analysis to be used in the decision making. In other words, the results obtained from the process of data analysis will be used by the researcher to find the right answer to answer his or her question, discovered the important pattern in the data through the correlation analysis and regression analysis, and helped the researcher to communicate the results with the biggest possible impact. The data collected was analysed by using Statistical Package for Social Science (SPSS Version 16.0). All items and variables were coded before entered to the computer in order to carry out factor analysis. The reasons or purpose of having a data analysis is to help the researcher to achieve the objective of the study. The data analysis can be classified into two which are descriptive and inferential. Among the analyses that will be used in this study are reliability analysis, factor analysis, correlation analysis, and regression analysis.

### **3.8.1 DESCRIPTIVE STATISTIC**

Descriptive statistics are used to describe the basic features of the data in a study. It provides simple summaries about the sample and about the observations that have been made. The summaries may be either in the form of quantitative like summary statistics, or visual such as simple graphs. It can also be described as a presentation of data in the form of tables and charts or summarization by means of percentiles and standard deviations.

Descriptive statistics do not make any conclusions that extend beyond the data being analysed, instead it just describing what is or what the data shows. Thus, the descriptive statistics are simply to describe what is going on in the data being analysed. By using the descriptive analysis, the researcher is able to present quantitative description in a manageable

form. Descriptive statistics help us to simplify large amounts of data in a sensible way. Each descriptive statistic reduces lots of data into a simpler summary.

In this study descriptive statistic such as missing values, normality test, frequency, mean, and standard deviation used to describe the basic features of the data in a study. This will provide simple summaries about the sample and the measures. Together with simple graphics analysis, this will form the basis of virtually every quantitative analysis of data.

### **3.8.2 INFERENCE STATISTIC**

Inferential statistics are techniques that allow the researchers to apply the information obtained from the samples to make generalizations about the populations. For example, a researcher is interested in the exam marks of all students in Malaysia. It is not feasible to measure all exam marks of all students in Malaysia so he or she may measure a smaller sample of students, for example, 2000 students, that are used to represent the larger population of all students in Malaysia. Thus, it can be said that, statistical inference is the process of drawing conclusions from data that is subject to random variation, for example, observational errors or sampling variation. It draws conclusions and, in some cases, making predictions about the properties of a population based on information obtained from a sample.

It is more commonly used to answer cause-and-effect questions or make predictions based from the available data. However, inferential statistics do not prove causality. Thus, a proof of an issue is always depends on the given theories, may be a statistical data obtained from the previous research by other researchers, and it is vital that such theories be clearly stated prior to using inferential statistics. For example, suppose that a researcher want to say that on average, male workers are paid significantly more than female workers for full-time work. There might be some competing explanations that exist for this discrepancy. In this case,

inferential statistics can provide evidence to prove one theory is more accurate than the other, however any ultimate conclusions about actual causality must come from a theory supported by both the data and sound logic.

In this study, the researcher will only discuss the method of Pearson correlation coefficient and linear regression that commonly been used in the inferential analysis to analyse the data.

### 3.8.2.1 Pearson Correlation Coefficient

Correlation is a measure of the relationship between two (2) or more variables normally between the independent and dependent variables. The symbol of a correlation is  $r$ , and its range is from -1.00 to +1.00. The value of -1.00 represents a perfect negative correlation while a value of +1.00 represents a perfect positive correlation. A value of 0.0 represent a lack of correlation. The closer the measure to 1.00, the more likely the relationship is statistically significant (Muchinsky, 1993). According to “Guilford Rule of Thumb” (Guilford, 1956) the strength of correlation shown in Table 3.

**Table 3: Interpretation of Strength of Correlation Coefficient**

| Value of Coefficient | Relation between variables |
|----------------------|----------------------------|
| 0.0 – 0.30           | Very Low Relationship      |
| 0.30 – 0.50          | Low Relationship           |
| 0.50 – 0.70          | High Relationship          |
| 0.70-1.00            | Very High Relationship     |

### 3.8.2.2 Linear Regression

Linear regression attempts to model the relationship between two variables by fitting a linear equation to observed data. One variable is considered to be an explanatory variable,

and the other is considered to be a dependent variable. In this study, linear regression has been used to analyse the relationship between two variables. For each subject (or experimental unit), the purpose is to find the best straight line through the data. In some situation, the slope and/or intercept have a scientific meaning.

Should a researcher wants to perform a linear regression analysis, it is advisable to conduct a preliminary test for example a scatterplot, to determine whether there is a relationship in existence between the two variables of interest. Should there is no relationship, then fitting a linear regression model to the data probably will not provide a useful model.

### **3.9 CONCLUSION**

This chapter explained the research design, location of the study, instruments used in data collection, and criteria for the selection of respondents. A clear understanding of the research methodology is important so that the reader or user of this study will able to comprehend why data has been analysed in certain ways and the direction of the study. The following chapter will discuss on the findings of the study.

## **CHAPTER 4**

### **FINDINGS**

#### **4.0 INTRODUCTION**

This chapter presents, analyses, and discusses the research findings from the survey questionnaire. The results are divided into three sections. The first section deals with the analysis and discussion of data from the survey questionnaire. The second section deals with the biographic and background information of the respondents by looking at genders, race, age, level of education, and year of working. While the third section present a summary of the results. This chapter will explains the level of relationship between the organizational climate and human resource practices toward the high performance work systems.

#### **4.1 PILOT TEST**

A pilot test is a technique applied to test the design and/or methods and/or instruments prior carrying out the actual research. It usually involves simulating the actual data collection process on a small scale to get feedback on whether or not the instruments are likely to work as expected in a “real world” situation. A typical pilot test involves administering instruments to a small group of individuals that has similar characteristics to the target population, and in

a manner that stimulates how data will be collected when the instruments are administered to the target population.

In the pilot test, the researcher has distributed fifty questionnaires to the employees of ANGKASA, and they were given about a week to answer. Luckily, all of them returned the questionnaire as requested within the time promised. Then the reliability analysis was performed to the data collected by using the SPSS (Statistical Package for the Social Sciences) software. Reliability refers to the extent to which a scale produces consistent results should the measurements are repeated a number of times. By looking at the Cronbach's Alpha in the reliability analysis, if the association of data is high, it is considered that the scale yields consistent results and is therefore reliable. According to Sekaran (2003), the value of Cronbach's Alpha of 0.70 and above is considered reliable.

The results of the reliability analysis in the pilot test are shown as below.

**Table 4 : Reliability Analysis for Organizational Climate, Human Resource Practices and High Performance Work Systems ( Pilot Test)**

| Variables                     | Cronbach's Alpha ( $\alpha$ ) | Cronbach's Alpha Based on Standardized Items | Number of Items |
|-------------------------------|-------------------------------|----------------------------------------------|-----------------|
| Organizational Climate        | 0.644                         | 0.701                                        | 17              |
| Human Resource Practices      | 0.910                         | 0.910                                        | 26              |
| High Performance Work Systems | 0.796                         | 0.829                                        | 13              |

Based on the test conducted, the Cronbach's Alpha for Organizational Climate, Human Resource Practices and High Performance Work Systems in the pilot test is 0.64, 0.9 and 0.8 respectively. Referring to the Cronbach's Alpha of the variables, although the value for organizational climate is below that 0.70, but it still can be acceptable. Hence, the distribution of questionnaire for data collection can be proceeded. The analysis of the data collected from the distribution of the questionnaire will be explained below. In the next section, the researcher will conduct several tests or analysis to the data collected from the

sampling process to ensure they are reliable, relevant, and valid in order to construct a conclusion on the research questions. Among the procedures that will be conducted are reliability analysis, factor analysis, anti-image analysis, factor loading when necessary, mean and standard deviation of the variables, correlation analysis and regression analysis.

## **4.2 THE RELIABILITY ANALYSIS**

In this section, the researcher will conduct a reliability analysis to the 261 samples collected from the respondents. In this study, the main focus is the figure shown by the Cronbach's Alpha. Cronbach's alpha determines the internal consistency or average correlation of items in a survey instrument to gauge its reliability (Cronbach, 1951). In reliability analysis, internal consistency is used to measure the reliability of a summated scale where several items are summed to form a total score. The higher the score, the more reliable the generated scale is. Nunnally (1978) has indicated 0.7 to be an acceptable reliability coefficient but lower thresholds are sometimes used in the literature.

### **4.2.1 The Reliability Analysis for Organizational Climate**

First of all, the reliability test on the items of organizational climate will be made. The number of items is 17. Should it was found that the Cronbach's Alpha is too low, then a few items might need to be deleted in order to push up the figure. In the first attempt, the Cronbach's Alpha obtained is 0.358. It is just too way back from the acceptable level.

**Table 5 : The Cronbach's Alpha for Organizational Climate**

#### **Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|----------------------------------------------|------------|
| .358             | .439                                         | 17         |

In order to increase the Cronbach's Alpha, the researcher had deleted item OC14 which resulted an increase to 0.46. Still not satisfy, another item was deleted, which is C20, where the Cronbach's Alpha was increased to 0.57. As the researcher still wants to get a better result, another item was deleted which is C18, resulted a Cronbach's Alpha of 0.65, which is fairly acceptable.

**Table6: The Cronbach's Alpha for Organizational Climate after item C14, C18, and C20 were deleted**

| Reliability Statistics |                                              |            |
|------------------------|----------------------------------------------|------------|
| Cronbach's Alpha       | Cronbach's Alpha Based on Standardized Items | N of Items |
| .654                   | .645                                         | 14         |

Thus, after the deletion of items C14, C18 and C2, the number of items left for organizational climate is 14. They will be ignored in the future data analysis.

#### **4.2.2 The Reliability Analysis for Human Resource Practices**

Here the reliability analysis to determine the internal consistency of the items of human resource practices will be performed. The number of items to be tested is 26.

**Table 7: The Reliability Analysis for Human Resource Practices**

#### **Reliability Statistics**

| Cronbach's Alpha | Cronbach's Alpha Based on Standardized Items | N of Items |
|------------------|----------------------------------------------|------------|
| .899             | .890                                         | 26         |

The Cronbach's Alpha for Human Resource Practices is high, which is above 0.7, thus it is strongly acceptable. As the Cronbach's Alpha obtained is considered high, then no deletion of item is necessary.

#### 4.2.3 The Reliability Analysis for High Performance Work Systems

Here the reliability analysis to determine the internal consistency of the items of high performance work systems will be performed. The number of items to be tested is 13.

**Table 8: The Reliability Analysis for High Performance Work Systems**

| Reliability Statistics |                                              |            |
|------------------------|----------------------------------------------|------------|
| Cronbach's Alpha       | Cronbach's Alpha Based on Standardized Items | N of Items |
| .780                   | .812                                         | 13         |

From the tables shown above, the Cronbach's Alpha for the organizational climate is 0.65, which is below the acceptable level. While, the Cronbach's Alpha for the human resource practices and high performance work systems is fairly strong and acceptable, which is 0.9 and 0.78 respectively.

The summary of the results from the above reliability analysis can be shown as follows.

**Table 9 : Reliability Analysis for Organizational Climate, Human Resource Practices and High Performance Work Systems**

| Variables                     | Cronbach's Alpha ( $\alpha$ ) | Cronbach's Alpha Based on Standardized Items | Number of Items |
|-------------------------------|-------------------------------|----------------------------------------------|-----------------|
| Organizational Climate        | 0.654                         | 0.645                                        | 14              |
| Human Resource Practices      | 0.899                         | 0.890                                        | 26              |
| High Performance Work Systems | 0.780                         | 0.812                                        | 13              |

However, the reliability analysis alone is not enough to determine the absolute reliability and validity of the items of the variables. Another analysis, known as Factor Analysis is also important to be carried out in order to determine the reliability and validity of the items being tested. One of the objectives of the Factor Analysis is to increase the internal consistency of the items by reducing the number of items or detecting structure in the relationship between items and classifying them. The procedure of Factor Analysis will be discussed next.

#### **4.3 FACTOR ANALYSIS**

The purpose of factor analysis is to describe the variation among many variables in terms of a few underlying but unobservable random variables called factors. Factor analysis can be viewed as a statistical procedure for grouping variables into subsets such that the variables with each set are mutually highly correlated, whereas at the same time variables in different subsets are relatively uncorrelated.

In the Factor Analysis, the researcher will firstly determine the KMO (Keiser-Meyers-Oklin) of the variable. After that, moving to table of Anti-Image matrices, the values of anti-image correlation with an 'a-square' is analysed. Any item with an 'a-square' value which is below than 0.5 will be omitted. After that, the researcher will look at the cumulative variance

to see how far a set of items of the variables is spread out. Normally, the higher the cumulative variance is, the better the correlation between items in the variable.

#### 4.3.1 Factor Analysis for Organizational Climate

The table below shows two tests that indicate the suitability of your data for structure detection. For the Kaiser-Meyer-Olkin measure of sampling adequacy, high value that close to 1.0 generally indicate that a factor analysis may be useful with the data. The KMO obtained for the organizational climate is 0.80, with a sig. of 0.00. As the KMO is considered high, factor loading analysis is not necessary.

**Table 10 : KMO and Bartlett's Test for Organizational Climate**

| KMO and Bartlett's Test                          |      |         |
|--------------------------------------------------|------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |      | .795    |
| Approx. Chi-Square                               |      | 907.681 |
| Bartlett's Test of Sphericity                    | df   | 91      |
|                                                  | Sig. | .000    |

Then, looking at the table of Anti-Image Matrices, there is no 'a-square' value which is below than 0.50, an acceptable number as it shows that the distribution of the items is nearly normal.

Through the factor analysis procedure, the items in organizational climate will be grouped accordingly based on their mutual correlation. Referring to the table below, **Factor 1** consists of items OC 7, OC 5, OC 8, OC 6, and OC 15. While **factor 2** consists of OC 22, OC 19, OC 21, and OC 16, and **factor 3** consists of OC 1, OC 2, OC 4 and OC 3.

**Table 11: Rotated Component Matric for Organizational Climate**

| Rotated Component Matrix <sup>a</sup> |           |      |      |
|---------------------------------------|-----------|------|------|
|                                       | Component |      |      |
|                                       | 1         | 2    | 3    |
| OC7                                   | .759      |      |      |
| OC5                                   | .697      |      |      |
| OC8                                   | .669      |      |      |
| OC6                                   | .584      |      |      |
| OC15                                  | .555      |      |      |
| OC22                                  |           | .801 |      |
| OC19                                  |           | .791 |      |
| OC21                                  |           | .748 |      |
| OC16                                  |           | .564 |      |
| OC1                                   |           |      | .804 |
| OC2                                   |           |      | .727 |
| OC4                                   |           |      | .555 |
| OC3                                   |           |      | .504 |
| OC17                                  |           |      |      |

Item which is extracted is OC 17.

**Table 12: Items of Organizational Climate According to Factors**

| Factor 1         | Factor 2         | Factor 3         |
|------------------|------------------|------------------|
| OC 7             | OC 22            | OC 1             |
| OC 5             | OC 19            | OC 2             |
| OC 8             | OC 21            | OC 3             |
| OC 6             | OC 16            | OC 4             |
| OC 15            |                  |                  |
| No. of items = 5 | No. of items = 4 | No. of items = 4 |

By referring to the questionnaire, we will be able to determine what are the areas that each factor is relate to. For **factor 1**, OC 5, OC 6, OC 7, OC 15 and OC 8 is measuring the communication style and decision making process in the organization. While for **factor 2**, OC 16, OC 19, OC 21 and OC 22 is looking at the bureaucracy in the organization. In **factor 3**, OC 1, OC 2, OC 3, and OC 4 is measuring the work organization or work methods practiced in the organization.

Then, another reliability test will be conducted based on the factors above in order to see the reliability of each item in the particular factor.

**Table 13 : Reliability Analysis For Organizational Climate By Factors**

|                                                            | Cronbach's Alpha | Cronbach's Alpha Based On Standardized Items | Number of Items |
|------------------------------------------------------------|------------------|----------------------------------------------|-----------------|
| Organizational Climate – Communication and Decision Making | 0.730            | 0.734                                        | 5               |
| Organizational Climate – Bureaucracy                       | 0.730            | 0.729                                        | 4               |
| Organizational Climate –work methods                       | 0.702            | 0.706                                        | 4               |

It can be seen that the reliability analysis according to factor produced a better result, with a Cronbach's Alpha for communication and decision making of 0.73, bureaucracy of 0.73, and work methods of 0.70. It shows that the items in those factors are mutually highly correlated, thus strongly reliable. Then, in the next sub-chapter, the effect of factor analysis on the human resource practices will be explained.

#### 4.3.2 Factor Analysis for Human Resource Practices

Through the factor analysis, the KMO for human resource practices is found to be 0.86, with a sig of 0.00.

**Table 14: KMO and Bartlett's Test for Human Resource Practices**

| KMO and Bartlett's Test                          |      |          |
|--------------------------------------------------|------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |      | .856     |
| Approx. Chi-Square                               |      | 3047.094 |
| Bartlett's Test of Sphericity                    | Df   | 325      |
|                                                  | Sig. | .000     |

In the table of ‘Anti-Image Matrices’, it was found out that there are three which have an “a-square” that is below than 0.50. Those items are HRP 45, HRP 48, and HRP 49. As a result, these three items must be extracted from the analysis. Then another calculation of new KMO is done, without those three omitted items. The new KMO is 0.89, with a sig of 0.00. Clearly, with a higher figure of KMO and sig. When referred to the new table of ‘Anti-Image Matrices’, there was still another item with an ‘a-square” that below 0.50, thus need to be omitted, which is HRP 54. After the omission of HRP 54, the new KMO is 0.9, with a sig. of 0.00. Thus there are four items of human resource practices that will be omitted from the analysis, which are HRP 45, HRP 48, HRP 49 and HRP 54. The cumulative variance for human resource practices is 52.2%. This is fairly acceptable, but it would be better if higher percentage is obtained.

**Table 15: Value of KMO and Bartlett’s Test on Human Resource Practices After Anti Image Process was Conducted**

| Activities                                  | Omitted Items          | KMO  | Bartlett’s Test of Sphericity(sig) |
|---------------------------------------------|------------------------|------|------------------------------------|
| Before anti image process                   | None                   | 0.86 | 0.00                               |
| After anti image ( 1 <sup>st</sup> Attempt) | HRP 45, HRP 48, HRP 49 | 0.89 | 0.00                               |
| After anti image (2 <sup>nd</sup> Attempt)  | HRP 54                 | 0.90 | 0.00                               |

By referring to the table of Rotated Component Matrix, the researcher is able to determine what the components represent.

**Table 16: Rotated Component Matrix For Human Resource Practices**

| Rotated Component Matrix <sup>a</sup> |           |   |   |
|---------------------------------------|-----------|---|---|
|                                       | Component |   |   |
|                                       | 1         | 2 | 3 |
| HRP36                                 | .738      |   |   |
| HRP39                                 | .684      |   |   |
| HRP43                                 | .631      |   |   |

|       |      |      |      |
|-------|------|------|------|
| HRP56 | .587 |      |      |
| HRP59 | .562 |      |      |
| HRP42 | .544 |      |      |
| HRP47 | .521 |      |      |
| HRP40 | .514 |      |      |
| HRP38 |      |      |      |
| HRP55 |      |      |      |
| HRP51 |      | .838 |      |
| HRP52 |      | .803 |      |
| HRP50 |      | .763 |      |
| HRP60 |      | .646 |      |
| HRP61 |      | .521 |      |
| HRP58 |      |      |      |
| HRP37 |      |      |      |
| HRP46 |      |      | .884 |
| HRP44 |      |      | .739 |
| HRP57 |      |      | .572 |
| HRP53 |      |      | .505 |
| HRP41 |      |      |      |

Referring table of “Rotated Component Matrix”, HRP 38, HRP 55, HRP 58, HRP 37, and HRP 41 are not listed in any component in the above table, thus they will be extracted in future data analysis.

**Table 17: Items of Human Resource Practices According to Factor**

| Factor 1         | Factor 2         | Factor 3         |
|------------------|------------------|------------------|
| HRP 36           | HRP 51           | HRP 46           |
| HRP 39           | HRP 52           | HRP 44           |
| HRP 43           | HRP 50           | HRP 57           |
| HRP 56           | HRP 60           | HRP 53           |
| HRP 59           | HRP 61           |                  |
| HRP 42           |                  |                  |
| HRP 47           |                  |                  |
| HRP 40           |                  |                  |
| No. of items = 8 | No. of items = 5 | No. of items = 4 |

By referring to the questionnaire, we are able to know what area does each factor is measuring. For **Factor 1**, HRP 36, HRP 39, HRP 40, HRP 42, HRP 47, HRP 56, HRP 59 and HRP 43 are measuring Training and Development. For **Factor 2**, HRP 51, HRP 52, HRP 50,

HRP 60, and HRP 61 are measuring the area of compensations. For **Factor 3**, HRP 46, HRP 44, HRP 57 and HRP 53 are measuring the benefits.

A new reliability analysis according to factors above will be calculated to determine the reliability of items in each factor.

**Table 18: Reliability Analysis For Human Resource Practices By Factors**

|                                                     | Cronbach's Alpha | Cronbach's Alpha Based On Standardized Items | Number of Items |
|-----------------------------------------------------|------------------|----------------------------------------------|-----------------|
| Human Resource Practices – Training and Development | 0.842            | 0.846                                        | 8               |
| Human Resource Practices – Compensations            | 0.841            | 0.843                                        | 5               |
| Human Resource Practices – Benefits                 | 0.772            | 0.779                                        | 4               |

The Cronbach's Alpha derived from the reliability analysis for the training and development, compensations and Benefits after the factor analysis are 0.84, 0.84 and 0.77 respectively. As they are 0.7 and above, they are considered as mutually highly correlated. Next, the factor analysis on high performance work systems is explained.

#### 4.3.3 Factor Analysis for High Performance Work Systems

Firstly the researcher will compute the KMO for the 13 items of the high performance work system. KMO obtained is shown in the table below.

**Table 19: KMO and Bartlett's Test for High Performance Work Systems**

| KMO and Bartlett's Test                          |      |          |
|--------------------------------------------------|------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |      | .746     |
| Approx. Chi-Square                               |      | 1087.285 |
| Bartlett's Test of Sphericity                    | Df   | 78       |
|                                                  | Sig. | .000     |

The KMO obtained is 0.75 with the Bartlett's test of sphericity (sig) is 0.00. From the KMO obtained, it can be said that the relationship of the items is strong and acceptable.

Then, the table of ‘Anti-Image Matrices’ was inspected. The area of focus is on the “anti-image correlation” section, in order to determine any item with an ‘a-square’ of below than 0.50 to be omitted from the analysis. As all of the items are 0.50 and above, there is no anti-image. No omission of item need to be done.

The cumulative variance obtained is 31.89%. Meaning the level of inter-relationship among items is low, which may lead to abnormal pattern of distribution. Hence, the researcher decided to conduct a factor loading analysis to determine which items have caused this situation. In the table of factor loading, the researcher will look for an item with a value of below 0.40 to be extracted. It was found out that, there are two items which are HPWS 26 and HPWS 28, with a factor loading which is below 0.40. Thus, these two items will be omitted from the study, which resulted to the reduction on number of items to be analysed further on in this study. With the omission of those two items, the number of items for high performance work systems is reduced from 13 to 11, and the Cumulative Variance is increased to 35.735.

**Table 20 : The Cumulative Variance of High Performance Work Systems Before Factor Loading Procedure**

| Component | Total Variance Explained |               |              |                                     |               |              |
|-----------|--------------------------|---------------|--------------|-------------------------------------|---------------|--------------|
|           | Initial Eigenvalues      |               |              | Extraction Sums of Squared Loadings |               |              |
|           | Total                    | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % |
| 1         | 4.147                    | 31.897        | 31.897       | 4.147                               | 31.897        | 31.897       |
| 2         | 1.849                    | 14.225        | 46.122       |                                     |               |              |
| 3         | 1.192                    | 9.166         | 55.288       |                                     |               |              |
| 4         | .983                     | 7.560         | 62.847       |                                     |               |              |
| 5         | .960                     | 7.387         | 70.234       |                                     |               |              |
| 6         | .775                     | 5.962         | 76.196       |                                     |               |              |
| 7         | .763                     | 5.867         | 82.064       |                                     |               |              |

|    |      |       |         |  |  |  |
|----|------|-------|---------|--|--|--|
| 8  | .529 | 4.066 | 86.129  |  |  |  |
| 9  | .470 | 3.615 | 89.744  |  |  |  |
| 10 | .418 | 3.218 | 92.962  |  |  |  |
| 11 | .382 | 2.938 | 95.900  |  |  |  |
| 12 | .308 | 2.365 | 98.265  |  |  |  |
| 13 | .226 | 1.735 | 100.000 |  |  |  |

Extraction Method: Principal Component Analysis.

**Table 21: The Cumulative Variance with 11 Items After Factor Loading Procedure**

| Component | Total Variance Explained |               |              |                                     |               |              |
|-----------|--------------------------|---------------|--------------|-------------------------------------|---------------|--------------|
|           | Initial Eigenvalues      |               |              | Extraction Sums of Squared Loadings |               |              |
|           | Total                    | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % |
| 1         | 3.931                    | 35.735        | 35.735       | 3.931                               | 35.735        | 35.735       |
| 2         | 1.664                    | 15.131        | 50.866       |                                     |               |              |
| 3         | 1.152                    | 10.471        | 61.337       |                                     |               |              |
| 4         | .904                     | 8.217         | 69.554       |                                     |               |              |
| 5         | .776                     | 7.053         | 76.607       |                                     |               |              |
| 6         | .577                     | 5.247         | 81.854       |                                     |               |              |
| 7         | .525                     | 4.776         | 86.631       |                                     |               |              |
| 8         | .446                     | 4.057         | 90.687       |                                     |               |              |
| 9         | .411                     | 3.735         | 94.423       |                                     |               |              |
| 10        | .385                     | 3.497         | 97.919       |                                     |               |              |
| 11        | .229                     | 2.081         | 100.000      |                                     |               |              |

Extraction Method: Principal Component Analysis.

So a new KMO is calculated by using the 11 items. The new KMO is 0.75, sig = 0.00, which is similar like before factor loading was conducted, but the cumulative variance has increased to 35.74%.

The next table shows the effect to the KMO and Cumulative Variance, before and after the Factor Loading procedure was performed.

**Table 22: Cumulative Variance for High Performance Work Systems, before and after Factor Loading Procedure**

| Number of Items | KMO  | Sig  | Cumulative Variance |
|-----------------|------|------|---------------------|
| 13              | 0.75 | 0.00 | 31.89%              |
| 11*             | 0.75 | 0.00 | 35.74%              |

\*after factor loading- HPWS 26 and HPWS 28 were extracted

It can be seen from the table above, after the factor loading been done, the cumulative variance has increase from 31.89% to 35.74%, which is better and show a stronger relationship among items. A new Cronbach's Alpha is obtained through the reliability analysis by using the new number of items.

**Table 23: The Reliability Analysis For High Performance Work Systems After Factor Analysis**

| Reliability Statistics |                                              |            |
|------------------------|----------------------------------------------|------------|
| Cronbach's Alpha       | Cronbach's Alpha Based on Standardized Items | N of Items |
| .810                   | .816                                         | 11         |

The table below show the differences of Cronbach's Alpha of each variable before and after Factor Analysis.

**Table 24: The Reliability Analysis for Organizational Climate, Human Resource Practices and High Performance Work Systems**

| Before Factor Analysis |            |        | After Factor Analysis |            |        |
|------------------------|------------|--------|-----------------------|------------|--------|
| Variables              | Cronbach's | No. of | Variables             | Cronbach's | No. of |

|                                  | Alpha | Items |                                         | Alpha | Items |
|----------------------------------|-------|-------|-----------------------------------------|-------|-------|
| Organizational<br>Climates (OC)  | 0.65  | 17    | OC – Communication &<br>Decision Making | 0.73  | 5     |
|                                  |       |       | OC- Bureaucracy                         | 0.73  | 4     |
|                                  |       |       | OC- Work Methods                        | 0.70  | 4     |
| Human Resource<br>Practices(HRP) | 0.89  | 26    | HRP – Training &<br>Development         | 0.84  | 8     |
|                                  |       |       | HRP – Compensations                     | 0.84  | 5     |
|                                  |       |       | HRP - Benefits                          | 0.77  | 4     |
| High Performance<br>Work Systems | 0.78  | 13    | High Performance Work<br>Systems        | 0.81  | 11    |

#### 4.4 DELETED ITEMS

Several items from the variables have been deleted in the process to obtain a better Cronbach's Alpha in the reliability analysis.

**Table 25: Items Deleted of the Variables after the Reliability Analysis and Factor Analysis**

| Variables                     | Deleted Items                          | No. of Items Deleted |
|-------------------------------|----------------------------------------|----------------------|
| Organizational Climates       | OC 14, OC 20, OC 18, OC 17             | 4                    |
| Human Resource Practices      | HRP 38, HRP 55, HRP 58, HRP 37, HRP 41 | 5                    |
| High Performance Work Systems | HPWS 26, HPWS 28                       | 2                    |

#### 4.5 DATA SCREENING

Data screening is the process of ensuring the collected data is clean and ready for analyses before the researcher can conduct further statistical analyses. It is important that

those data is screened in order to ensure the data is useful, reliable, and valid for testing causal theory.

#### **4.5.1 Missing Value Analysis**

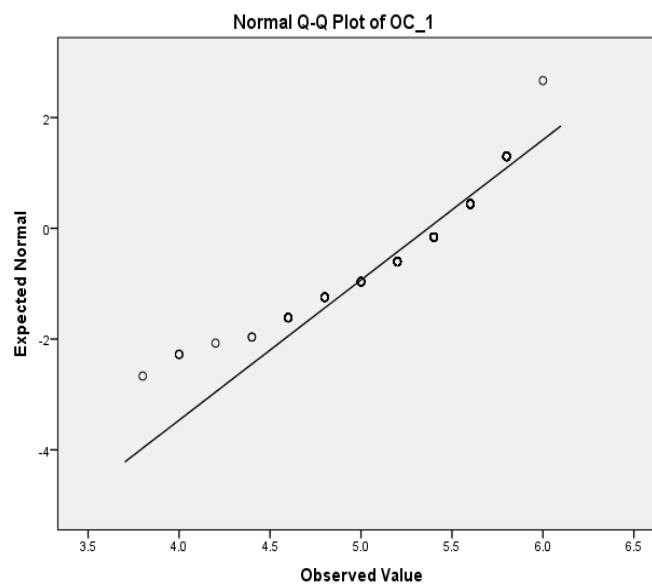
The missing value analysis has been made to check the missing values during the data transferred. Based on the result obtained by using the SPSS, the percentage of missing values for all the items in questionnaire is 0.00% which means that there is no missing values during the data transfer. The SPSS output is attached in Appendix B at the end of this project paper.

#### **4.5.2 NORMALITY TEST**

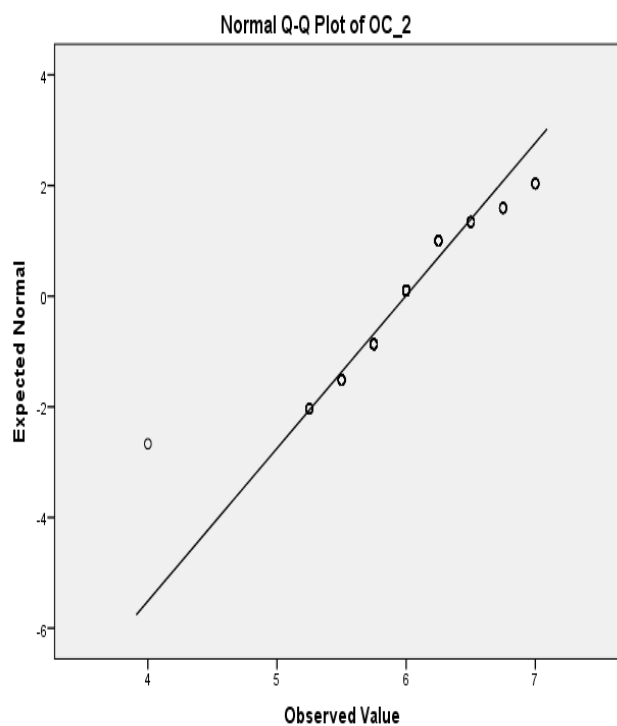
Normality test is used to determine whether a data set is well model by a normal distribution or not, or in other way of saying it, to compute how likely an underlying random variable is to be normally distributed. In the process of any statistical tests, a normality test is considered prerequisite as maintaining a normal distribution of data is an underlying assumption in parametric testing. It can be performed in two ways, either graphically and numerically. None is better than the other, each of them has its own advantages and disadvantages. It is not the intention of the researcher to discuss in details about those advantages and disadvantages of the options, as the main focus is to see and explain the normality of the data been used in this study.

Researcher used the Normal Q-Q plot to see the normality of the data. Coakes and Steed (2003) suggested, on normal probability plot, data that follows a normal distribution will appear linear, a straight line. The normality test for each variable will be made and discussed in the section.

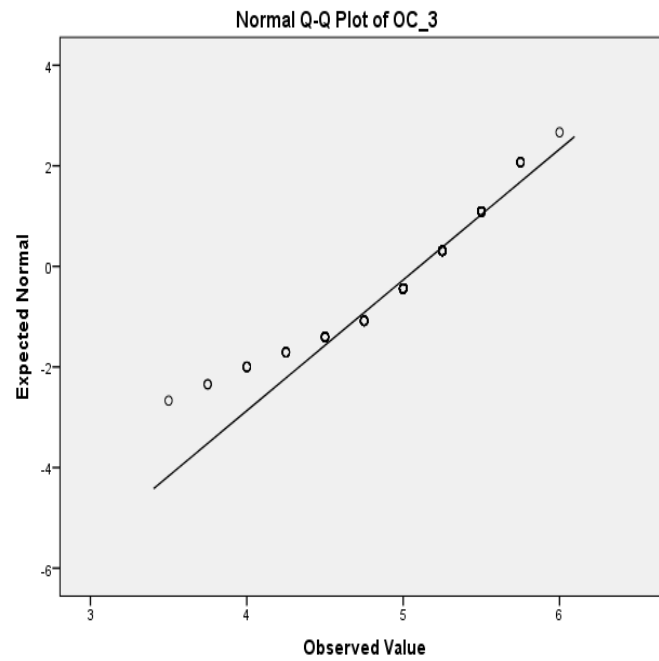
**Chart 1: The Normality of Items in Communication and Decision Making for Organizational Climate**



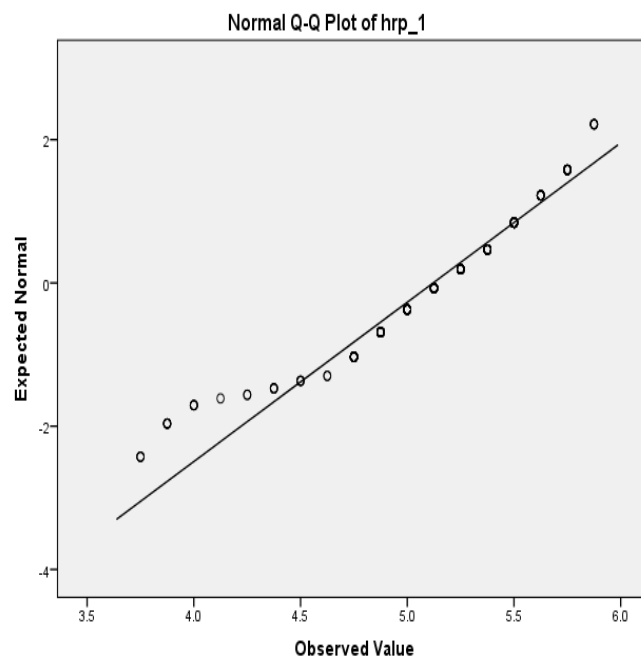
**Chart 2: The Normality of Items in Bureaucracy for Organizational Climate**



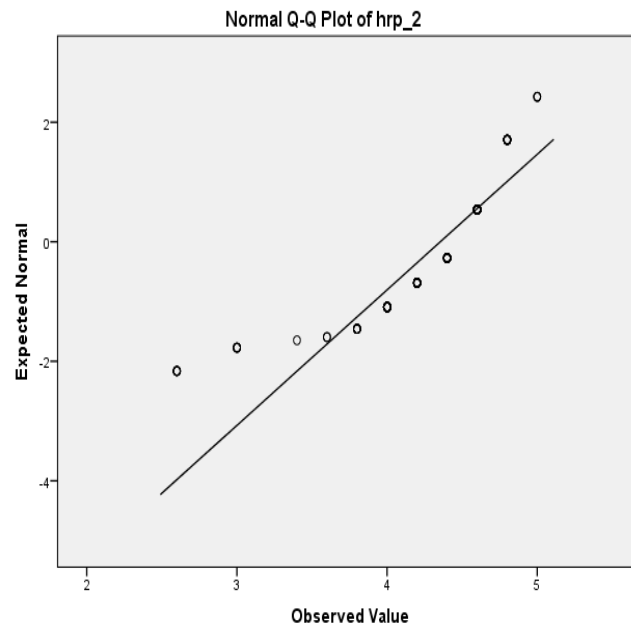
**Chart 3: The Normality of Items in Work Methods for Organizational Climate**



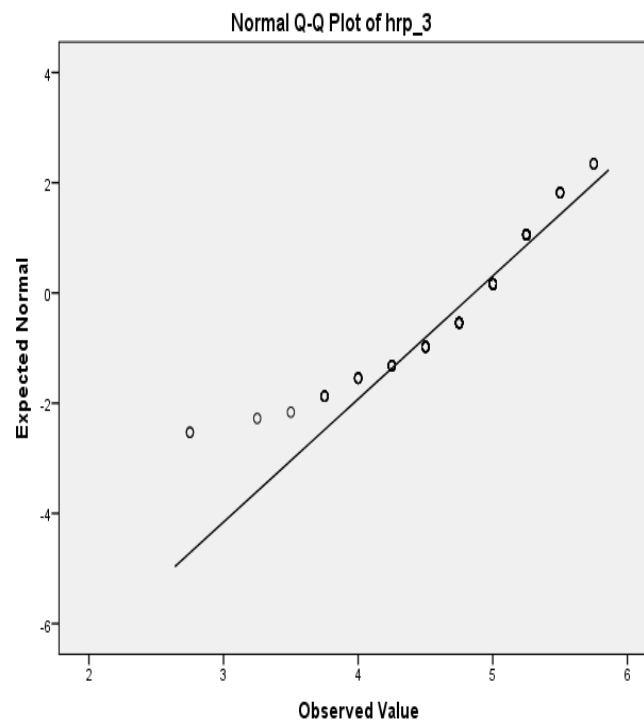
**Chart 4: The Normality of Items in Training and Development for Human Resource Practices**



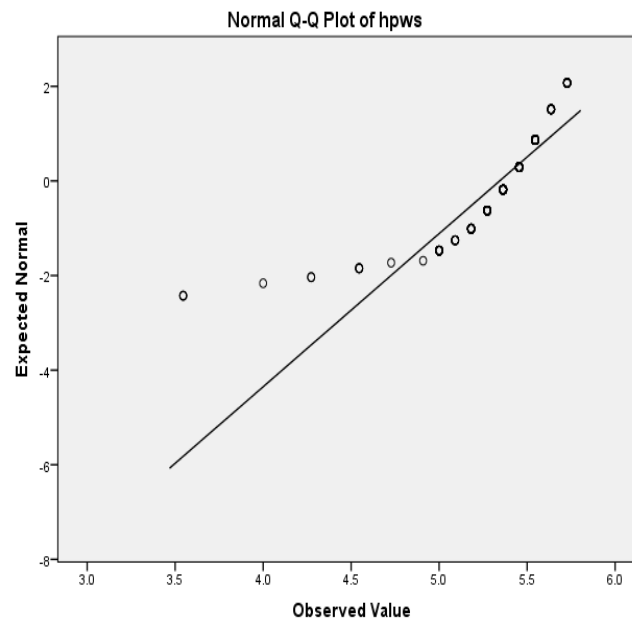
**Chart 5: The Normality of Items in Compensations for Human Resource Practices**



**Chart 6: The Normality of Items in Benefits for Human Resource Practices**



**Chart 7: The Normality Of Items For High Performance Work Systems**



Looking at the Q-Q Plot for each factor, the normality of some of the items in the variable look pretty deviate from the line, but that does not mean they are not normal. This situation might occur due the way the respondent selected the answer in the questionnaire. As the same question in the questionnaire might be interpreted differently by different respondent, this has caused the tabulation of data not in a stable strata. Referring to the table 26 shown below, the researcher is in the opinion that the relationship between items in the variables is pretty strong and acceptable, thus valid to be used as a basis in making conclusion in this study regarding the issue been discussed.

To further understand the normality test conducted on the variables, the table of Test of Normality below can be referred to. If the charts above show the normality test according to the factors, in the table below, the test was done to the overall items in the variables, so that comparison can be made from the perspective of graphical and numerical.

**Table 26: Test of Normality on Organizational Climate, Human Resource Practices and High Performance Work Systems**

| Tests of Normality |                                 |     |      |              |     |      |
|--------------------|---------------------------------|-----|------|--------------|-----|------|
|                    | Kolmogorov-Smirnov <sup>a</sup> |     |      | Shapiro-Wilk |     |      |
|                    | Statistic                       | df  | Sig. | Statistic    | df  | Sig. |
| OC (com & DM)      | .192                            | 261 | .000 | .876         | 261 | .000 |
| OC (Bureaucracy)   | .289                            | 261 | .000 | .844         | 261 | .000 |
| OC (Work Methods)  | .222                            | 261 | .000 | .888         | 261 | .000 |
| HRP (T&D)          | .105                            | 261 | .000 | .933         | 261 | .000 |
| HRP (Comps)        | .238                            | 261 | .000 | .726         | 261 | .000 |
| HRP (Benefits)     | .253                            | 261 | .000 | .854         | 261 | .000 |
| HPWS               | .214                            | 261 | .000 | .709         | 261 | .000 |

a. Lilliefors Significance Correction

The above table presents the results from two well-known tests of normality, namely the Kolmogorov-Smirnov Test and the Shapiro-Wilk Test. The Shapiro-Wilk Test is more appropriate for small sample sizes (< 50 samples) but can also handle sample sizes as large as 2000. For this reason, the researcher will use the Shapiro-Wilk test as our numerical means of assessing normality. If the Sig. value of the Shapiro-Wilk Test is greater than 0.05 then the data is normal. If it is below 0.05 then the data significantly deviates from a normal distribution.

#### 4.6 SURVEY RESPONSES

From the 450 questionnaires distributed to the respondents, only 261 questionnaires were collected. The response rate is 58%. Referring to Hair et al (1984), when the response rates above 50% are generally considered acceptable, but if the response rates are 80% and above are far more desirable. In this study 58% is acceptable and can be used in this research.

#### 4.7 DESCRIPTIVE ANALYSIS

The data for this study was gathered from 450 employees of Angkasa from various units or departments in Kelana Jaya Selangor. The following sections disclosed the

descriptive summary on the demographic information of the respondents. The dependent and independent variables are obtained using SPSS Version 16.0.

#### 4.7.1 DEMOGRAPHIC ANALYSIS

##### 4.7.1.1 Age

The age of respondents who answered the questionnaires given in table 27 shown that the respondents who were 30 – 34 years old is the major group in this research which are 44% of the total respondents, followed by those who are 35 - 39 years old, 32%, 40 – 44 years old, 11%, 25 – 29, 11%, 45 – 49 years old, 2 % and 20 – 24 years old, 0.4%.

**Table 27 : Frequency For Age of Respondents**

|       | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-----------|---------|---------------|--------------------|
| 20-24 | 1         | .4      | .4            | .4                 |
| 25-29 | 28        | 10.7    | 10.7          | 11.1               |
| 30-34 | 115       | 44.1    | 44.1          | 55.2               |
| 35-39 | 84        | 32.2    | 32.2          | 87.4               |
| 40-44 | 29        | 11.1    | 11.1          | 98.5               |
| 45-49 | 4         | 1.5     | 1.5           | 100.0              |
| Total | 261       | 100.0   | 100.0         |                    |

##### 4.7.1.2 Gender

Out of 261 respondents, about 174 peoples or 67% of the employees of ANGKASA are male, the rest are female which represent 87 peoples or 33%. Table 28 below shows the distribution of gender group in this study.

**Table 28: Frequency Gender of the Respondent**

|        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
|--------|-----------|---------|---------------|-----------------------|
| female | 87        | 33.3    | 33.3          | 33.3                  |
| male   | 174       | 66.7    | 66.7          | 100.0                 |
| Total  | 261       | 100.0   | 100.0         |                       |

#### 4.7.1.3 Race

Regarding on the race of the respondents who answered the questionnaire in table 29, it shows that all of the respondent are Malays.

**Table 29: Frequency For Race of Respondents**

| D64    |           |         |               |                       |
|--------|-----------|---------|---------------|-----------------------|
|        | Frequency | Percent | Valid Percent | Cumulative<br>Percent |
| melayu | 261       | 100.0   | 100.0         | 100.0                 |

#### 4.7.1.4 Level of Education

In terms of the level of education in table 30, the highest educational level of respondents are come from Master degree level which are 0.8% of the total respondents,

followed by Bachelor degree holder 39%, Diploma of 40%, Sijil Tinggi Pelajaran Malaysia (STPM) of 6% and Sijil Pelajaran Malaysia (SPM) of 15%.

**Table 30: Level of Education of the Respondents**

| D65     |           |         |               |                    |
|---------|-----------|---------|---------------|--------------------|
|         | Frequency | Percent | Valid Percent | Cumulative Percent |
| degree  | 101       | 38.7    | 38.7          | 38.7               |
| diploma | 104       | 39.8    | 39.8          | 78.5               |
| master  | 2         | .8      | .8            | 79.3               |
| SPM     | 39        | 14.9    | 14.9          | 94.3               |
| STPM    | 15        | 5.7     | 5.7           | 100.0              |
| Total   | 261       | 100.0   | 100.0         |                    |

#### 4.7.1.5 Years of Working

By referring to table 31, most of the respondents who answered the questionnaires have been working for six years with ANGKASA, which is 18%. The longest year of working is 18 year with 2,7% and the shortest period of working is two years with 1.1%.

**Table 31: Frequency For Years of Working Of The Respondents**

| D66 |           |         |               |                    |
|-----|-----------|---------|---------------|--------------------|
|     | Frequency | Percent | Valid Percent | Cumulative Percent |
| 10  | 21        | 8.0     | 8.0           | 8.0                |
| 11  | 7         | 2.7     | 2.7           | 10.7               |
| 12  | 10        | 3.8     | 3.8           | 14.6               |
| 13  | 10        | 3.8     | 3.8           | 18.4               |
| 14  | 1         | .4      | .4            | 18.8               |
| 15  | 5         | 1.9     | 1.9           | 20.7               |
| 16  | 2         | .8      | .8            | 21.5               |
| 17  | 2         | .8      | .8            | 22.2               |

|       |     |       |       |       |
|-------|-----|-------|-------|-------|
| 18    | 7   | 2.7   | 2.7   | 24.9  |
| 2     | 3   | 1.1   | 1.1   | 26.1  |
| 2.5   | 4   | 1.5   | 1.5   | 27.6  |
| 3     | 17  | 6.5   | 6.5   | 34.1  |
| 4     | 15  | 5.7   | 5.7   | 39.8  |
| 5     | 28  | 10.7  | 10.7  | 50.6  |
| 6     | 47  | 18.0  | 18.0  | 68.6  |
| 7     | 29  | 11.1  | 11.1  | 79.7  |
| 8     | 32  | 12.3  | 12.3  | 92.0  |
| 9     | 21  | 8.0   | 8.0   | 100.0 |
| Total | 261 | 100.0 | 100.0 |       |

#### 4.7.1.6 Job Position

Most of the respondents hold the position as an Officer, with a number of 108 people that contributed 41% to the total number of respondents. This is followed by the Assistant Officer of 99 people (38%), Clerk of people (17%), Administration Officer of 5 people (2%) and Chief Clerk of 4 people (2%).

**Table 32 : Frequency For Job Position Of The Respondents**

| D67           |           |         |               |                    |
|---------------|-----------|---------|---------------|--------------------|
|               | Frequency | Percent | Valid Percent | Cumulative Percent |
| admin officer | 5         | 1.9     | 1.9           | 1.9                |
| asst.officer  | 99        | 37.9    | 37.9          | 39.8               |
| chief clerk   | 4         | 1.5     | 1.5           | 41.4               |
| clerk         | 45        | 17.2    | 17.2          | 58.6               |
| officer       | 108       | 41.4    | 41.4          | 100.0              |
| Total         | 261       | 100.0   | 100.0         |                    |

#### 4.7.2 MEAN AND STANDARD DEVIATION

The mean is used for this analysis to measure of central tendency calculated by dividing the sum of all values by the number of value in the data set. The Standard Deviation

is a measure of the spread that is given by the positive square root of the variance. The researcher will be able to identify the perception of employees toward the variables by using this kind of analysis.

**Table 33: Mean and Standard Deviation For Organizational Climate, Human Resource Practices and High Performance Work Systems**

| Descriptive Statistics    |     |         |         |        |                |
|---------------------------|-----|---------|---------|--------|----------------|
|                           | N   | Minimum | Maximum | Mean   | Std. Deviation |
| OC (Com & DM)             | 261 | 3.80    | 6.00    | 5.3686 | .39508         |
| OC (Bureaucracy)          | 261 | 4.00    | 7.00    | 5.9962 | .36226         |
| OC (Work Methods)         | 261 | 3.50    | 6.00    | 5.1034 | .38459         |
| HRP(Training&Development) | 261 | 3.75    | 5.88    | 5.1212 | .44961         |
| HRP(Compensations)        | 261 | 2.60    | 5.00    | 4.3548 | .44092         |
| HRP(Benefits)             | 261 | 2.75    | 5.75    | 4.8621 | .44790         |
| HPWS                      | 261 | 3.55    | 5.73    | 5.3438 | .30883         |
| Valid N (listwise)        | 261 |         |         |        |                |

A large standard deviation indicates that the data points are far from the mean and a small standard deviation indicates that they are clustered closely around the mean. It can be seen from the above table that the standard deviation for each variable is below than 0.50, means that the distribution of items are fairly close with a normal distribution.

### 4.7.3 REGERESSION AND CORRELATION ANALYSIS

In this part, the researcher is analyse the employees' perception on the variables been study. This can be done by looking at the mean of the answers selected by them. From the tables shown below, a researcher is looking at the how the employees rate the existence of the variables in the organization and in what way all of these variables may affect them by looking at the mean of their answer. At the same time, a researcher also wants to determine the level of correlation between the independent variables and dependent variable.

#### 4.7.3.1 Perception on Organizational Climate

**Table 34 :Employees’ Perception Towards Organizational Climate**

| Summary Item Statistics |       |         |         |       |                   |          |            |
|-------------------------|-------|---------|---------|-------|-------------------|----------|------------|
|                         | Mean  | Minimum | Maximum | Range | Maximum / Minimum | Variance | N of Items |
| Item Means              | 5.480 | 4.747   | 6.027   | 1.280 | 1.270             | .215     | 13         |
| Item Variances          | .284  | .182    | .490    | .308  | 2.698             | .007     | 13         |
| Inter-Item Covariances  | .035  | -.078   | .181    | .259  | -2.302            | .005     | 13         |
| Inter-Item Correlations | .118  | -.258   | .558    | .816  | -2.165            | .056     | 13         |

The overall means for organizational climate is 5.480. From the mean given, the employees of ANGKASA see organizational climate as an important element to make them keep on motivated and committed in performing their works. Out of 7, the overall mean of the employees’ selection is 5.4. This means that the employees see that a conducive working environment and supportive management are part of important elements in ensuring a high performance work outcomes. An issue such as ‘employee-friendly’ as well as ‘family-friendly’ must be taken into consideration in formulating organizational policies or working plans. The involvement of employees in the decision making process must be encouraged as a crucial factor in contributing towards competitiveness, innovativeness, creativeness and happiness in the organization.

#### 4.7.3.2 Perception on Human Resource Practices

**Table 35: Employees’ Perception Towards Human Resource Practices**

| Summary Item Statistics |       |         |         |       |                   |          |            |
|-------------------------|-------|---------|---------|-------|-------------------|----------|------------|
|                         | Mean  | Minimum | Maximum | Range | Maximum / Minimum | Variance | N of Items |
| Item Means              | 4.835 | 3.697   | 5.636   | 1.939 | 1.524             | .403     | 17         |
| Item Variances          | .373  | .250    | .720    | .470  | 2.876             | .011     | 17         |
| Inter-Item Covariances  | .131  | .025    | .246    | .221  | 9.775             | .002     | 17         |
| Inter-Item Correlations | .354  | .087    | .681    | .594  | 7.823             | .013     | 17         |

The overall means for organizational climate is 4.835. The employees perception on the human resource practices are moderate, where the human resource unit have to play a

more active roles so that the employees will see it important for the growth of the organization. It also shows that the employees expect more from the human resource unit as a strategic partner to the organizational development and growth.

#### 4.7.3.3 Perception on High Performance Work Systems

The overall means for high performance work systems is 5.34. This shows that most employees see high performance work systems as an important element that need to be practiced in their organization. The employees see that high performance work systems are able to help ANGKASA to gain a competitive advantage over its competitors in an effort to create a more business opportunities and increase profits with the objective to serve its members better. This need is seen more critical due to the volatile business world and globalisation.

**Table 36: Employees' Perception Towards High Performance Work Systems**

| Summary Item Statistics |       |         |         |       |                   |          |            |
|-------------------------|-------|---------|---------|-------|-------------------|----------|------------|
|                         | Mean  | Minimum | Maximum | Range | Maximum / Minimum | Variance | N of Items |
| Item Means              | 5.344 | 4.728   | 5.966   | 1.238 | 1.262             | .192     | 11         |
| Item Variances          | .276  | .172    | .460    | .289  | 2.683             | .008     | 11         |
| Inter-Item Covariances  | .077  | -.002   | .178    | .180  | -103.436          | .002     | 11         |
| Inter-Item Correlations | .287  | -.008   | .614    | .622  | -75.998           | .019     | 11         |

## 4.8 CORRELATION ANALYSIS

Pearson Correlation is a single number that describes the degree of relationship between two variables. In this study, it studies organizational climate and human resource practices with high performance work systems.

Referring to Guilford's Rule of Thumb (Guilford, 1956), the rule of thumb for interpreting the relationship in a correlation is, when  $r < 0.20$  (very weak correlation);  $0.20 < r < 0.40$  (weak correlation);  $0.40 < r < 0.70$  (moderate correlation);  $0.70 < r < 0.90$  (strong correlation);  $r > 0.90$  (very strong correlation).

#### **4.8.1 Relationship between Human Resource Practices and Organizational Climate with High Performance Work System**

The Pearson correlation method was applied in order to test the above objective. In table 37, the correlation coefficient for the Organizational Climate (Communication and Decision Making) is 0.52,  $p < 0.00$ , Organizational Climate (Bureaucracy) is -0.22,  $p < 0.00$  and Organizational Climate (Work Methods) is 0.56,  $p < 0.00$  for the organizational climate. While for the human resource practices, the pearson correlation for Training and Development is 0.66,  $p < 0.00$ , Compensations,  $p < 0.00$  and benefits 0.59,  $p < 0.00$ . Therefore, there was a fairly high relationship between human resource practices and high performance work systems, while organizational climate have moderate relationship to high performance work systems as according to "Guilford Rule of Thumb". Supported by the result in Table 38, the human resource practices have a stronger relationship compared to organizational climate because the  $r$  value for human resource practices is higher than organizational climate.

**Table 37: The results of Pearson Correlation Analysis for the Relationship between Organizational Climate and High Performance Work Systems**

| Variables                                                  | Pearson Correlation (r) | Level of Significance (p) |
|------------------------------------------------------------|-------------------------|---------------------------|
| Organizational Climate (Communication and Decision Making) | 0.52**                  | 0.00                      |
| Organizational Climate (Bureaucracy)                       | -0.22**                 | 0.00                      |

|                                          |        |      |
|------------------------------------------|--------|------|
| Organizational Climate<br>(Work Methods) | 0.56** | 0.00 |
|------------------------------------------|--------|------|

\*\* Correlation is significant at the 0.01 level (2-tailed),  $p < 0.01$

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

**Table 38: The results of Pearson Correlation Analysis for the Relationship between Human Resource Practices and High Performance Work Systems**

| Variables                                                              | Pearson Correlation (r) | Level of Significance (p) |
|------------------------------------------------------------------------|-------------------------|---------------------------|
| ** Correlation is significant at the 0.01 level (2-tailed), $p < 0.01$ |                         |                           |
| Human Resource Practices<br>(Training and Development)                 | 0.66**                  | 0.00                      |
| Human Resource Practices<br>(Compensations)                            | 0.56**                  | 0.00                      |
| Human Resource Practices<br>(benefits)                                 | 0.59**                  | 0.00                      |

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

## 4.9 REGRESSION ANALYSIS

If in the correlation analysis, the researcher is showing the level of relationship of both independent variables toward high performance work system, under the regression analysis the researcher will still analyse the relationship, but analysing which independent variables have a stronger or weaker relationship.

### 4.9.1 Relationship between Human Resource Practices and High Performance Work Systems

In this analysis, the researcher wants to determine which of the independent variables

have a stronger influence on the high performance work systems. This can be ascertain by looking at the Multiple Regression (R) of the variables. From the table below, the Multiple Regression (R) for the human resource practices is 0.723 and organizational climate is 0.501.

**Table 39 : Relationship Between Human Resource Practices and Organizational Climate Towards High Performance Work Systems**

| Variables                | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|--------------------------|-------------------|----------|-------------------|----------------------------|
| Human Resource Practices | .723 <sup>a</sup> | .522     | .520              | .21392                     |
| Organizational Climate   | .501 <sup>a</sup> | .251     | .248              | .26773                     |

a.Predictors: (constant), Human Resource Practice  
(F = 86.97, Sig = 0.00)

a.Predictors: (constant), Organizational Climate  
(F = 282.909, Sig = 0.00)

Thus, it can be interpreted that human resource practices have a greater influence on the high performance work system than the organizational climate. The next two tables below show the regression analysis for the independent variables according to factors.

**Table 40: Relationship between Organizational Climate (By Factors) And High Performance Work Systems**

| Variables                                                | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|----------------------------------------------------------|-------------------|----------|-------------------|----------------------------|---------------|
| Organizational Climate-Communication and Decision Making | .523 <sup>a</sup> | .274     | .271              | .26368                     | 2.133         |
| Organizational Climate-Bureaucracy                       | .219 <sup>a</sup> | .048     | .044              | .30194                     | 1.997         |
| Organizational Climate-Work Methods                      | .558 <sup>a</sup> | .311     | .308              | .25687                     | 1.782         |

From the table above, looking at the R, the highest is organizational climate-work methods with 0.56, followed by organizational climate-communication and decision making with 0.52 and organizational climate-bureaucracy with 0.22. Thus, it can be said that the work methods of organizational climate has the biggest influence on the high performance work systems and the least is organizational climate –bureaucracy.

**Table 41: Relationship between Human Resource Practices (By Factors) And High Performance Work Systems**

| Variables                                         | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|---------------------------------------------------|-------------------|----------|-------------------|----------------------------|---------------|
| Human Resource Practices – Training & Development | .663 <sup>a</sup> | .440     | .437              | .23165                     | 2.065         |
| Human Resource Practices – Compensations          | .583 <sup>a</sup> | .340     | .338              | .25130                     | 1.826         |
| Human Resource Practices – Benefits               | .588 <sup>a</sup> | .346     | .343              | .25027                     | 1.965         |

From the table above, looking at the R, the highest is human resource practices-Training and Development with 0.66, followed by human resource practices-Compensations with 0.59 and human resource practices-Benefits with 0.58.

If a comparison is made between those two tables above, it can be seen that all of the factors of human resource practices have higher R than organizational climate. The interpretation that can be made based on the analysis made, both of the independent variables are important in the implementation of high performance work systems in ANGKASA but the practices applied in the human resource have bigger effects on the high performance work systems. This might be due on the reason that the impact from the implementation of any particular human resource practices is direct to the employees compare to the organization climate, which is more intangible in nature. For example, if the organization increased the salary, then the increment can be felt by looking at the salary statement. On the other hand, it

is difficult to gauge the level of organizational climate, as it is merely based on the perception which may vary between employees.

#### **4.10 SUMMARY OF HYPOTHESES TESTING**

Based on the analysis, it can be concluded that there is a relationship between human resources practices and the high performance work systems towards ANGKASA. The analysis also proved that there is a relationship between organizational climate and high performance work systems towards ANGKASA. The results of hypothesis testing are as summarized in Table 42.

**Table 42: Summary of Hypothesis Testing**

|    | Hypothesis                                                                                                 | Result    |
|----|------------------------------------------------------------------------------------------------------------|-----------|
| H1 | There is a relationship between Human Resource Practices and High Performance Work Systems Towards Angkasa | Supported |
| H2 | There is a relationship between organizational Climate and High Performance Work Systems Toward Angkasa    | Supported |

Based on the analysis made, it can be said that both of the independent variables have an influence or there is a relationship between human resource practices and organizational climate towards the high performance work systems. The only difference is the intensity of the relationship, where the human resource practices show a higher level of correlation

compared to organizational climate. However, it does not mean that the human resource practices is more important than organization climate in the implementation of the high performance work system, but rather it is just referring to the level of influence that each independent variable has on the high performance work systems.

#### **4.11 CONCLUSION**

From the data analysis, it can be seen that there is a relationship between the human resource practices and organizational climate towards the high performance work systems. The level of the relationship that the human resource practices have towards the high performance work systems is higher than the organizational climate.

## **CHAPTER 5**

### **DISCUSSION, RECOMMENDATIONS AND CONCLUSIONS**

#### **5.0 INTRODUCTION**

In this final chapter, it presents the discussion, recommendations and conclusions of the study. This chapter is divided into four sections. The first section is an overview of the findings where the researcher will do some flashback of some important issues that have been discussed in the previous chapters but need to be highlighted here for the purpose of further discussion. In the second section, discussion of the findings will be made. While in the third section, some recommendations for future research are proposed, and the research implications were discussed in the last part of this chapter.

## 5.1 DISCUSSIONS

This study was conducted with the primary objective to measure the relationship or level of influence that the organizational climate and human resource practices have on the high performance work systems.

This study is aimed at answering several questions such as;

- 2 Does the organizational climate has an relationship on the implementation of High Performance Work Systems in ANGKASA?.
- 3 Does the human resource practices has an relationship on the implementation of High Performance Work Systems in ANGKASA?.
- 4 Which of the independent variables have a greater relationship on the successfulness of the high performance work systems in ANGKASA?.

The hypothesis states that “there is a relationship between organizational climate and high performance work systems” and “there is a relationship between the human resource practices and high performance work systems”. The analysis shows that there is a relationship between organizational climate and human resource practices with the high performance work systems towards ANGKASA. From the correlation analysis, the level of relationship ( $r$ ) can be calculated. From the calculation made, the  $r$  for organizational climate (Communication and Decision Making) is 0.52,  $p < 0.01$ , organizational climate (Bureaucracy) is -0.22,  $p < 0.01$  and organizational climate (Work Methods) is 0.56,  $p < 0.01$ . While the level of  $r$  for human resource practices are, human resource practices (Training and Development) is 0.66,  $p < 0.01$ , human resource practices (Compensations) is 0.56,  $p < 0.01$ , and human resource practices (Benefits) is 0.59,  $p < 0.01$ . From the level of  $r$  obtained, it can be said that, there is a high relationship between human resource practices and high performance work systems, while organizational climate have moderate level of relationship to

high performance work systems. This can be seen by looking at the higher level of agreement for human resource practices towards high performance work systems compared to the organizational climate. The relationship between human resource practices and organizational climate on the high performance work systems can also be ascertained through the regression result, where R or Multiple Correlation obtained for human resource practices is 0.723<sup>a</sup>, Sig. equal to 0.000a, and organizational climate with a R of 0.501<sup>a</sup>, Sig. equal to 0.000a which support the results obtained for r in the correlation analysis.

The human resource practices and organizational climate show a relationship with the high performance work systems although at a different intensity. It means that they contribute a certain degree of contribution in the successfulness of the implementation of the high performance work systems in ANGKASA.

For the high performance work systems to be successfully implemented, it must have several key areas to focus, among them are (1) employment security (2) selective hiring of new personnel (3) self-managed teams (4) decentralization of decision making (5) comparatively high compensation contingent on organizational performance (6) extensive training (7) reduced status distinctions and barriers and (8) extensive sharing of financial and performance information throughout the organization (Pfeffer, 1998). This is supported by Evans and Davis (2005) where they have highlighted seven key areas of high performance work systems such as (1) selective staffing, (2) self-managed teams, (3) decentralized decision making, (4) extensive training, (5) flexible job assignments, (6) open communication, and (7) performance-contingent compensation. It can be seen that most of the researchers or group of experts have given the same or nearly similar list of areas on high performance work systems.

This study was conducted with a view to give some resourceful insights to the cooperatives in Malaysia to have a better understanding of the concept of high performance

work systems. The researcher also sees this study as another endeavour to better improve the standard of cooperative movement in Malaysia, and at the same time to broaden the scope of research done regarding to the cooperatives previously.

With a slow development happening in this sector, especially to the small and medium size of cooperatives, the researcher worried that they will not be able to cope with the rapid changes in the business landscape or changes to the demands from the evolving market, or consumers who are now more knowledgeable and selective in their purchasing pattern to goods that have the qualities of innovative, good quality products but low in price, and attractive. Porter (1980, 1985), argues that two successful “generic” business strategies to achieve sustainable competitive advantage over other firms in the industry are the cost leadership strategy and the differentiation strategy. Thus, the cooperatives have to be more sensitive and responsive to the needs of the markets and be different from the others in innovating their products or services. In addition, according to Bac (1997), specifically pointed out *‘enhanced response speed as a significant aspect of evolving Korean business strategies’*, that make their business expand within a short period of time. In view of this, a paradigm shift in the way how cooperatives should be managed is critically needed, so that the cooperatives able to contribute more to the national economic development, a good business player in the market as well as an effective body in improving the social well-being of the members.

Through this study, the level of relationship between human resource practices and organizational climate toward high performance work systems can be identified. By understanding the results obtained, it will benefit the cooperatives in a way that it can be used as the guidance for the cooperatives to identify factors in the formulation of management policies that capable of stimulating a high performance work processes or a healthy working environment. More importantly, the human resource practices that been practiced in the

organization must be able to improve the level of organizational citizenship behaviour among the employees, which indirectly will create a better organizational climate. This is supported by the Schneider, Gunnarson and Niles-Jolly (1994) claim that organizational citizenship behaviour is essential in creating a climate that allows for organizational success.

This study put a great emphasize on the important roles or the crucial effects play by human resource practices and organizational climate on the organizational performance. According to Daud and Mohamad (2010), HRM practices have been considered as one of the significant factors appear to boost the performance of organization. There is some empirical support for the hypothesis that firms, which align the HRM practices with their business strategy, will achieve superior outcomes (Bac & Lawler, 1999). Other empirical studies have claimed that climate has a considerable impact upon organizational effectiveness (Campion, Medsker & Higgs, 1993; Drexler, 1977; Franklin, 1975; Fredrickson, Jensen & Beaton, 1972; Likert, 1961, 1967, and others).

The wrong perception that people have about cooperatives is that they think cooperatives as a non-profit organization. This misunderstanding has underestimated the real capabilities that the cooperatives have in social context. The truth is, cooperatives are just like normal business entity with the objective of profit maximisation. The only difference is, the cooperatives are required to use part of their profit for the benefits of their members.

It is suggested that the cooperatives make a SWOT analysis to identify what are their strengths, weaknesses, opportunities and threats. Once these have been done, they may identify what is their X-factor that may affect their organizational performance the most. This is important because the cooperatives can give more concentration on the factors that they have the strongest values, and give less concentration on the factors that are moderate or least capacity to master in. This identification is crucial for an efficient and effective allocation of resources. Through the data analysis done in this study, the cooperatives can see which

factors have a higher level of relationship with the high performance work systems, where more allocation of sources and attention can be allocated for this area.

From the mathematical analysis, it has been shown that the human resource practices have a more influence towards the high performance work systems than organizational climate. So, the management of ANGKASA need to make some changes to the current roles played by the Human Resource Unit and transform it to be a strategic partner to every business activities or plans in the organization.

In line with the notion of the high performance work systems, the employees must be seen as the main character in the achievement of organizational objectives, perhaps through high-involvement human resource strategies. An organization with a management that strongly values HRM and people as a source of competitive advantage is more likely to use high-involvement HRM strategies (Raduan & Naresh, 2006). High-involvement HRM strategy is typically characterized by significant delegation of authority to lower-level employees (empowerment), extensive training and development, reliance on pay for performance (significant contingent or “at-risk” pay), broadly defined job responsibilities, and employee participation in non-work aspect of organizational decision making (Butler, Ferris & Napier, 1991). Movement towards a high-involvement goal implies making better use of employee capacities for self-management, personal development and problem solving (Lorenz and Valeyre, 2005). High-involvement work processes empower workers to make more decisions, enhance the information and knowledge they need to do so, and reward them for doing so. (Boxall and Macky, 2009). When employees were given some space in the policies making, they will feel appreciated and have better organizational citizenship behaviour. All of the criteria describe by the above researchers able to promote good human resource practices and healthy organizational climate, which will lead to high performance organizational processes and outcomes.

Training and development is one of the key areas in the high performance work systems. Training and development of the employees must be given a top priority in the planning and management of an organization. Training and development can be defined as activities that have been planned in order to assist the learning related to job knowledge, skills and employees behaviors (Noe, Hollenbeck, Gerhart & Wright, 2010). Without proper skills, knowledge, competency and capabilities to carry out the tasks assigned to them, is a catastrophic to the organization. The objectives of the organization can never be achieved without a calibre, committed, resourceful and well trained employees. Well-trained employees can share their knowledge and use their creativity to produce or serve a product to customer and understand the system development of product or service in the organization (Nazlina et al., 2011). Still many sectors, especially the cooperatives think that training and development as something which is “a waste of money” due to its indirect implication to the business. Training and development are recognized as important HRM issues in small firms but in terms of providing formal training, it is still being overlooked by them. This is because most employers often underestimate the benefit and cost of training to small firms is not worthwhile (Storey, 2004; Westhead & Storey, 1997). They are still in a state of ignorance of the advantages and benefits should the employees of the organization are well trained and resourceful about their work related issues. Improvements in knowledge enhance ability (Boxall and Macky, 2009) of the employees to perform better in their work.

Any employee who has fulfilled his work requirement with excellence must be rewarded accordingly so that he or she will be felt appreciated and motivated to perform better in the future. Compensation can be described as an incentives of pay or reward that has been planned to stimulate individuals to join, retain and perform well over time to the firm (Lepak & Snell, 2002; Youndt et al., 1996). The objective of compensation is to motivate employees to perform their job effectively to facilitate the accomplishment of organization

goals. Thus, it is crucial to decide on how employees are being paid, as it can attract talented employees or bring down a motivation of existing employees (Nazlina et al., 2011). In order to attract more and good applicants and sustain quality and talented employees, cooperatives *‘should design an effective formal system of compensation since it is a potential source of achieving competitive advantage, which sequentially enhancing organizational performance’* (Delery & Doty, 1996; Tzafrir, 2006). Rewards can also be used as a direct attempt to enhance motivation, which may also be improved through empowerment (enjoying more autonomous work), information (feeling better informed) and knowledge (enjoying a growth in skills) (Boxall and Macky, 2009).

### 5.1.1 Employees’ Perception On Human Resource Practices, Organizational Climate and HPWS

The researcher will discuss about the respondent’s perception on the variables been tested in this study. Its purpose is to determine the level of agreement of human resource practices, organizational climate and high performance work systems among the respondents which represent the employees of ANGKASA. The explanation will be based on the table presented below.

**Table 43: Item Mean and Item Variance of Organizational Climate, Human Resource Practices and High Performance Work Systems**

| Items                                | Mean | Min  | Max  |
|--------------------------------------|------|------|------|
| <b>Organizational Climate</b>        |      |      |      |
| Item Mean                            | 5.48 | 4.75 | 6.03 |
| Item Variance                        | 0.28 | 0.18 | 0.49 |
| <b>Human Resource Practices</b>      |      |      |      |
| Item Mean                            | 4.84 | 3.70 | 5.64 |
| Item Variance                        | 0.37 | 0.25 | 0.70 |
| <b>High Performance Work Systems</b> |      |      |      |

|               |      |      |      |
|---------------|------|------|------|
| Item Mean     | 5.34 | 4.73 | 5.96 |
| Item Variance | 0.28 | 0.17 | 0.46 |

Item mean shows the average number of answer selected by the respondents in the questionnaire, while item variance shows how far a set of numbers is spread out. The smaller the point for item variance is the better.

From the table above, the item mean for organizational climate is 5.48 with an item variance of 0.28. Looking at the item mean, it can be interpreted that the employees perceive the organizational climate as high and their opinion by average are similar as the item variance is small in number. The same assumptions can be used for the high performance work systems as it number is not so much difference with the organizational climate. But, if refer to the human resource practices, the item mean is 4.84 with an item variance of 0.37. A little bit higher from the other two, but still the dispersion of item is not so varied.

The employees' perception on organizational climate and high performance work systems are high but moderate on the human resource practices. More attention should be focused on all of the items since they have a great impact on employees' satisfaction which will reflect to the employee performance. The ability to understand what the employees think and continuously interact with them will support the implementation of better human resource practices and organizational climate in an effort towards the high performance work systems in ANGKASA. A review of the literature indicates that human resources can be key ingredients affecting organizational performance (Pfeffer, 1998; Rauch, Frese, & Utsch, 2005), source of sustainable competitive advantage (Barney, 1991; Krishnan & Singh, 2011) and the function of human resource management (HRM) (Wright, McMahan, & McWilliams, 1994).

### **5.1.2 Relationship between HR Practices and Organizational Climate on HPWS**

The purpose of this study is to determine the relationship between the human resource practices and organizational climate towards the high performance work systems. Based on the linear correlation analysis, looking at  $r$  of the variable where  $r$  for human resource practices (Training and Development) is 0.66, while  $r = 0.56$ ,  $p < 0.01$  for human resource practices (Compensations), and  $r = 0.59$ ,  $P < 0.01$  for human resource practices (Benefits). It shows that there was a high level of relationship between human resources practices and high performance work systems. While, the correlation coefficient ( $r$ ) is 0.52,  $p < 0.01$  for organizational climate (Communication and Decision Making Process), while  $r$  for organizational climate (Bureaucracy) is -0.22,  $p < 0.01$ , and  $r = 0.56$ ,  $p < 0.01$  for organizational climate (Work Methods).

From the result obtained, it indicates that the human resource practices have slightly higher influence on the high performance work systems compare to organizational climates. Thus, more attention must be put on the construction of human resource practices in the organization so that a supportive and conducive working environment can be created. Indirectly, it will lead to a happy organizational climate. In different studies, many researches have proven that a supportive HR practices do increase employees' job satisfaction which in the end increase job performance and organization productivity. (Pradeep, 2000). A good organizational climate will complement the human resource practices in order to create a productive and innovative organization. Undeniably, organizational social capital has been shown to improve performance by enabling employees to access the resources that are embedded within a given network and by facilitating the transfer and sharing of knowledge (Levin and Cross 2004, Tsai and Ghoshal 1998).

### **5.1.3 Influence of HR Practices and Organizational Climate towards HPWS**

In determining the influence of the human resource practices and organizational climate toward the high performance work systems, the researcher will be looking at the Multiple Regression (R) in the regression analysis. It was found that the relationship of the human resource practices to the high performance work systems is .723<sup>a</sup>, while organizational climate is .501<sup>a</sup>. It shows that, human resource practices have more influence on the high performance work systems compared to organizational climate. Thus, the human resource unit of ANGKASA has to do a drastic leap in a way how the functions and systems practiced can be transformed into a more high performance processes. The “high performance” HR bundles have a consistently more positive effect on unit performance than more “traditional” HR bundles (Huselid & Becker, 1997). It is about time the human resource unit of ANGKASA see itself as a strategic partner to every unit or department in ANGKASA, as ‘human resource systems also affect a range of variables on a more collective level, helping to build organisational capabilities, and influencing the organisational culture, and social and psychological climate in which individuals are embedded’ (Snell, 1999; Evans and Davis, 2005).

A good human resource practices been practiced in the organization will normally result to a good organizational climate. Thus, it can be said that these two independent variables are complement each other towards the high performance work systems. They are not supposed to compete, instead they must be supporting each other in the process. Having a higher multiple regression (R) does not mean that the human resource practices is more important than organizational climate, but it shows a more significant role play by human resource practices in the process. As mentioned in the first sentence of this paragraph, a good organizational climate is a result of a good human resource practices. HR systems which help to enhance trust in management and/or among peers improve an organisation’s social capital’, the quality of relationships within and across groups (Leana and Burren, 1999). The

individual and collective levels are inextricably linked because the performance opportunities of individuals and their motivations are influenced by the quality of resources, collaboration and trust in their working environment (Boxall and Macky, 2009). Research by Hornsby & Kuratko (2003) found that employees who were motivated and highly skilled can be a determinant of the capability of small firms in order to maintain competitiveness in the current business environment.

## **5.2 RECOMMENDATIONS FOR FUTURE RESEARCH**

While a large body of research has demonstrated the positive impact of high-performance practices on the financial performance of organizations, the impact on the well-being of workers is less well known (Pradeep, 2000). Thus, in the future research, the researcher should look at the implications of the implementation of the high performance work systems to the well-being of the employees. Those effects must be looked from the perspective of employees as well as their surroundings such as family, style of living, relationship with co-workers, and many more.

The future research also needs to focus on the actual processes experienced by workers such as involvement and intensification, 'should the study want to understand more how the high performance work systems work to influence the organisational outcomes and how they could work better' (Peter & Keith, 2009). A thorough study and longer period of

data assessment must be allocated so that a detail and comprehensive conclusion can be made about the issues been analysed.

The future researcher must conduct a proper briefing on the problems of the study. The proper briefing will provide a more understanding to the problems faced by the employees. Thus, the outcomes will be more meaningful and useful to the organization.

### **5.3 RESEARCH IMPLICATIONS**

The findings and analyses of the research are able to give the positive implications to the organizational operational or costs efficiency in the ability to generate more profits. Undeniably, the effectiveness of human resource practices is able to reduce the unnecessary costs or operational costs which simultaneously increase profit. The employees may feel appreciated and motivated when the organization practiced a good human resource practices, that make them work harder with high level of organizational citizenship behaviour, and as a results improve the productivity level. A decline in employees' disciplinary problems will enable the organization to focus more on the production and implement effective management and decision making processes.

This research will also able to provide some insights or platform to ANGKASA and other cooperatives should they want to implement the high performance work systems. The conceptual explanations given in this study are easy to understand and able to give some basic idea to the management of the cooperatives the basic framework of high performance work systems. The cooperatives '*should consider on how to enhance the capabilities in the fields of human resource and skills development in order to increase their business success*' (McEvoy, 1984).

The information provided in this study is useful in a way as a reminder to the management that, in the process of achieving organizational performance, objectives, and

missions, the welfare of the employees must also be included in the planning and decision making process. The evidence suggests that the high performance work systems have created insecure and stressful work environments leading to deterioration in the quality of work life and increased health and safety risks. To be stable and enduring, these work systems need to be redesigned to balance the needs of workers for a safe, healthy, and challenging work environment with organizational imperatives for improvements in productivity and product quality (Pradeep, 2000).

Many researchers have observed, internal development has been linked to a number of desirable organizational effects, including greater stability and predictability of a firm's stock of human resource, higher commitment to an organization, and better coordination and control (Raduan & Naresh, 2006). The management of organization need to create a climate that promote the urge for self-development, and healthy competition among the employees by emphasizing learning organization, job redesign, job rotation, succession planning and many more. The job assigned to the employees must be made challenging so that they will find their work is interesting. One cannot argue with the view that a major reason for labour turnover is that employees are leaving because they find their jobs uninteresting (Boxall et al., 2003).

#### **5.4 CONCLUSIONS**

This research is designed to study the relationship between human resource practices and organizational climate towards the practice of high performance work systems in ANGKASA. The research model explained that there is an existence of relationship between human resource practices and organizational climate towards high performance work systems. Based on the data analysis, a researcher found that majority of the employees is more concerned with the human resource practices.

It is important that a firm adopt human resource practices that make best use of its employees. This trend has led to increased interest in the impact of human resource management on the organizational performance, and a number of studies have found a positive relationship between so-called “high-performance work practices” (Huselid, 1995) and company performance (Raduanm& Naresh,2006).

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## APPENDIX A: QUESTIONNAIRE

BAHAGIAN A (IKLIM ORGANISASI - mengukur apakah persepsi pekerja terhadap iklim atau suasana dalam sistem organisasi ini)

|   |                                                                                             | SSTB.....SSB |   |   |   |   |   |   |
|---|---------------------------------------------------------------------------------------------|--------------|---|---|---|---|---|---|
| 1 | Organisasi ini bertindak pantas menggunakan kaedah kerja yang telah ditambahbaik            | 1            | 2 | 3 | 4 | 5 | 6 | 7 |
| 2 | Organisasi ini mempunyai matlamat dan objektif yang jelas dan sesuai                        | 1            | 2 | 3 | 4 | 5 | 6 | 7 |
| 3 | Organisasi ini mengurus aktiviti-aktiviti kerjanya dengan dengan cara yang paling munasabah | 1            | 2 | 3 | 4 | 5 | 6 | 7 |
| 4 | Organisasi ini akan membuat keputusan pada peringkat di mana maklumat-maklumat yang         | 1            | 2 | 3 | 4 | 5 | 6 | 7 |

|    |                                                                                                                                                      |   |   |   |   |   |   |   |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
|    | diperolehi adalah paling lengkap dan tepat                                                                                                           |   |   |   |   |   |   |   |
| 5  | Organisasi ini membenarkan setiap kumpulan kerja memperoleh maklumat yang mencukupi, berkaitan perkembangan dalam jabatan-jabatan lain               | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6  | Organisasi ini menyatakan kepada kumpulan kerja, cara terbaik yang perlu diketahui untuk melaksanakan kerja mereka                                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7  | Selain daripada ketua saya, pihak atasan lain juga menerima idea dan cadangan daripada kumpulan kerja saya                                           | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8  | Organisasi ini mengamalkan komunikasi dua hala dalam menyelesaikan masalah secara berkesan antara jabatan                                            | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9  | Di organisasi ini, para pekerja menerima kesan daripada keputusan yang dicapai sekiranya ia adalah hasil daripada sumbangan idea mereka              | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10 | Di organisasi ini, para pekerja yang terlibat dalam membuat keputusan, boleh memperoleh maklumat yang diperlukan daripada semua peringkat organisasi | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11 | Di organisasi ini, pihak pengurusan mempengaruhi apa-apa operasi atau kerja yang sedang dilaksanakan di jabatan anda                                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12 | Di organisasi ini, para pekerja bukan pengurusan mempengaruhi apa-apa operasi atau kerja yang sedang dilaksanakan dalam jabatan anda                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13 | Di organisasi ini, para pekerja tidak berkesempatan mendapatkan pandangan daripada pekerja lain bila mereka memerlukan                               | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14 | Di organisasi ini, para pekerja terpaksa melalui kerenah birokrasi untuk melaksanakan sesuatu kerja yang diamanahkan                                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15 | Di organisasi ini, para pekerja akan sentiasa berhadapan dengan peraturan dan undang-undang yang sukar dijelaskan oleh mana-mana pihak               | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|    |                                                                                                                                     |    |   |   |   |   |   |   |
|----|-------------------------------------------------------------------------------------------------------------------------------------|----|---|---|---|---|---|---|
| 16 | Di organisasi ini, para pekerja perlu meneliti dan merujuk banyak peraturan dan undang-undang untuk melaksanakan kerja-kerja mereka | 1  | 2 | 3 | 4 | 5 | 6 | 7 |
| 17 | Di organisasi ini, para pekerja sentiasa berhadapan dengan pelbagai piawaian dalam prosedur pelaksanaan kerja-kerja mereka          | 1` | 2 | 3 | 4 | 5 | 6 | 7 |

#### BAHAGIAN B : AMALAN KERJA BERPRESTASI TINGGI

|    |                                                                                                                                                                                  |   |   |   |   |   |   |   |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
|    |                                                                                                                                                                                  |   |   |   |   |   |   |   |
| 18 | Para pekerja organisasi ini dibenarkan terlibat dalam apa-apa program perkongsian maklumat secara formal                                                                         | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19 | Kerja-kerja yang dilakukan oleh para pekerja adalah berdasarkan kepada analisis kerja ( <i>proses mengumpul maklumat berkaitan kerja</i> ) secara formal                         | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 20 | Lantikan secara dalaman lebih diutamakan bagi mengisi jawatan-jawatan dalam organisasi sejak kebelakangan ini                                                                    | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 21 | Organisasi ini melaksanakan tinjauan ke atas sikap pekerja mereka secara berkala                                                                                                 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 22 | Para pekerja organisasi ini terlibat dalam program-program berkaitan kualiti kerja yang dianjurkan oleh organisasi                                                               | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 23 | Para pekerja organisasi ini dibenarkan terlibat dalam setiap perancangan pelan program pemberian insentif organisasi                                                             | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 24 | Para pekerja organisasi ini mempunyai peluang untuk mengikuti latihan secara formal yang mencukupi                                                                               | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 25 | Para pekerja di organisasi ini dibenarkan terlibat dalam setiap bentuk penyelesaian berkaitan peraturan kilangan ( <i>ketidakpuasan</i> ) dan sistem aduan pekerja di organisasi | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 26 | Organisasi ini menjalankan ujian tertentu ke atas                                                                                                                                | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|    |                                                                                                              |   |   |   |   |   |   |   |
|----|--------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
|    | para pekerja sebelum diambil berkerja                                                                        |   |   |   |   |   |   |   |
| 27 | Penilaian prestasi menjadi penentu dalam setiap pakej ganjaran pekerjaan yang akan diperolehi oleh mereka    | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 28 | Di organisasi ini, para pekerja diberi penilaian prestasi mereka secara formal                               | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 29 | Di organisasi ini, setiap amalan kenaikan pangkat adalah mengikut peraturan biasa yang diamalkan secara adil | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 30 | Di organisasi ini, setiap jawatan yang ditawarkan akan dipenuhi oleh mereka yang benar-benar layak sahaja    | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

#### **BAHAGIAN C : AMALAN PENGURUSAN SUMBER MANUSIA**

|    |                                                                                                                              |   |   |   |   |   |   |   |
|----|------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
|    |                                                                                                                              |   |   |   |   |   |   |   |
| 31 | Saya digalakkan mengikuti program latihan dan pembangunan yang disediakan oleh majikan                                       | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 32 | Ketua saya menentukan program latihan dan pembangunan yang saya perlukan                                                     | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 33 | Saya diberi peluang untuk meningkatkan kemahiran dan pengetahuan bagi menambahbaik prestasi saya menerusi latihan berterusan | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 34 | Saya mendapat latihan yang diperlukan untuk melaksanakan tugas jawatan saya dengan baik                                      | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 35 | Saya diberi peluang untuk terlibat dalam aktiviti yang boleh membantu meningkatkan tahap kemahiran/kepakaran saya            | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 36 | Saya boleh membuat capaian maklumat bagi tujuan perancangan kerjaya saya                                                     | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 37 | Saya dibawa berbincang mengenai peluang pembangunan kerjaya oleh ketua saya                                                  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 38 | Saya diberi peluang yang sewajarnya untuk kemajuan kerjaya saya                                                              | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 39 | Saya berpuas hati dengan cara kenaikan pangkat                                                                               | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|    |                                                                                                                                            |   |   |   |   |   |   |   |
|----|--------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|
|    | yang dilaksanakan oleh syarikat                                                                                                            |   |   |   |   |   |   |   |
| 40 | Kenaikan pangkat ditentukan mengikut merit berasaskan prestasi kerja                                                                       | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 41 | Dalam syarikat ini, kenaikan pangkat ditentukan secara adil                                                                                | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 42 | Saya menerima penghargaan untuk pencapaian saya                                                                                            | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 43 | Gaji yang saya terima menggalakkan saya untuk melaksanakan kerja dengan lebih baik                                                         | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 44 | Insentif, seperti bonus memotivasikan saya untuk melakukan lebih daripada yang diperlukan                                                  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 45 | Saya menerima jumlah gaji yang setimpal dengan kerja yang saya lakukan                                                                     | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 46 | Secara umumnya, gaji saya adalah setara/sama dengan gaji rakan sekerja yang memegang jawatan yang setaraf dengan saya.                     | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 47 | Secara amnya, gaji saya adalah setara/sama dengan gaji bagi pekerjaan yang serupa yang dibayar oleh syarikat lain dalam industri yang sama | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 48 | Saya dinilai dengan adil berdasarkan prestasi kerja saya                                                                                   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 49 | Penilaian prestasi adalah berdasarkan prestasi kerja individu                                                                              | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 50 | Sumbangan individu adalah digalakkan dan dihargai                                                                                          | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 51 | Saya mampu melakukan sesuatu yang bermanfaat dalam pekerjaan saya                                                                          | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 52 | Saya dapat melihat hasil kerja yang saya lakukan                                                                                           | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 53 | Saya boleh berbangga apabila tugas berjaya disempurnakan dengan baik                                                                       | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 54 | Saya diberikan peluang untuk melakukan yang terbaik pada setiap masa                                                                       | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 55 | Ketua saya memberi sokongan dan galakan dengan sentiasa memberi maklumbalas tentang prestasi                                               | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

|                               |                                                         |                                                                                                                                                                                                                                                                                                                                                                                               |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
|-------------------------------|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---------------------------|--|---------------------|--|---------------------|--|----------------------|--|---------------------|--|---------------------|--|---------------------|--|------------------|--|
|                               | kerja saya                                              |                                                                                                                                                                                                                                                                                                                                                                                               |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| 56                            | Pekerjaan saya dapat memberi suatu kepuasan kepada saya | 1                                                                                                                                                                                                                                                                                                                                                                                             | 2 | 3 | 4 | 5 | 6 | 7 |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| <b>Bahagian D - DEMOGRAFI</b> |                                                         |                                                                                                                                                                                                                                                                                                                                                                                               |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| 57                            | Umur                                                    | <table border="1"> <tr> <td>Kurang dari 20 tahun</td> <td></td> <td>35 tahun – 39 tahun</td> <td></td> </tr> <tr> <td>20 tahun – 24 tahun</td> <td></td> <td>40 tahun – 44 tahun</td> <td></td> </tr> <tr> <td>25 tahun – 29 tahun</td> <td></td> <td>45 tahun – 49 tahun</td> <td></td> </tr> <tr> <td>30 tahun – 34 tahun</td> <td></td> <td>50 tahun ke atas</td> <td></td> </tr> </table> |   |   |   |   |   |   | Kurang dari 20 tahun      |  | 35 tahun – 39 tahun |  | 20 tahun – 24 tahun |  | 40 tahun – 44 tahun  |  | 25 tahun – 29 tahun |  | 45 tahun – 49 tahun |  | 30 tahun – 34 tahun |  | 50 tahun ke atas |  |
| Kurang dari 20 tahun          |                                                         | 35 tahun – 39 tahun                                                                                                                                                                                                                                                                                                                                                                           |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| 20 tahun – 24 tahun           |                                                         | 40 tahun – 44 tahun                                                                                                                                                                                                                                                                                                                                                                           |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| 25 tahun – 29 tahun           |                                                         | 45 tahun – 49 tahun                                                                                                                                                                                                                                                                                                                                                                           |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| 30 tahun – 34 tahun           |                                                         | 50 tahun ke atas                                                                                                                                                                                                                                                                                                                                                                              |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| 58                            | Jantina                                                 | <table border="1"> <tr> <td>Lelaki</td> <td></td> <td>Perempuan</td> <td></td> </tr> </table>                                                                                                                                                                                                                                                                                                 |   |   |   |   |   |   | Lelaki                    |  | Perempuan           |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| Lelaki                        |                                                         | Perempuan                                                                                                                                                                                                                                                                                                                                                                                     |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| 59                            | Bangsa                                                  | <table border="1"> <tr> <td>Melayu</td> <td></td> <td>India</td> <td></td> </tr> <tr> <td>Cina</td> <td></td> <td>Lain-lain (nyatakan)</td> <td></td> </tr> </table>                                                                                                                                                                                                                          |   |   |   |   |   |   | Melayu                    |  | India               |  | Cina                |  | Lain-lain (nyatakan) |  |                     |  |                     |  |                     |  |                  |  |
| Melayu                        |                                                         | India                                                                                                                                                                                                                                                                                                                                                                                         |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| Cina                          |                                                         | Lain-lain (nyatakan)                                                                                                                                                                                                                                                                                                                                                                          |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| 60                            | Tahap Pendidikan                                        | <table border="1"> <tr> <td>Darjah 6/ Sijil Kemahiran</td> <td></td> </tr> <tr> <td>SRP</td> <td></td> </tr> <tr> <td>SPM</td> <td></td> </tr> <tr> <td>Diploma</td> <td></td> </tr> <tr> <td>STPM</td> <td></td> </tr> <tr> <td>Ijazah Sarjana Muda</td> <td></td> </tr> <tr> <td>Ijazah Sarjana</td> <td></td> </tr> <tr> <td>Doktor Falsafah</td> <td></td> </tr> </table>                 |   |   |   |   |   |   | Darjah 6/ Sijil Kemahiran |  | SRP                 |  | SPM                 |  | Diploma              |  | STPM                |  | Ijazah Sarjana Muda |  | Ijazah Sarjana      |  | Doktor Falsafah  |  |
| Darjah 6/ Sijil Kemahiran     |                                                         |                                                                                                                                                                                                                                                                                                                                                                                               |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| SRP                           |                                                         |                                                                                                                                                                                                                                                                                                                                                                                               |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| SPM                           |                                                         |                                                                                                                                                                                                                                                                                                                                                                                               |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| Diploma                       |                                                         |                                                                                                                                                                                                                                                                                                                                                                                               |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| STPM                          |                                                         |                                                                                                                                                                                                                                                                                                                                                                                               |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| Ijazah Sarjana Muda           |                                                         |                                                                                                                                                                                                                                                                                                                                                                                               |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| Ijazah Sarjana                |                                                         |                                                                                                                                                                                                                                                                                                                                                                                               |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |
| Doktor Falsafah               |                                                         |                                                                                                                                                                                                                                                                                                                                                                                               |   |   |   |   |   |   |                           |  |                     |  |                     |  |                      |  |                     |  |                     |  |                     |  |                  |  |

|    |                                           |  |
|----|-------------------------------------------|--|
|    |                                           |  |
| 61 | Tempoh Berkhidmat (Nyatakan): _____ Tahun |  |
| 62 | Jawatan (Nyatakan):                       |  |

*-Terima Kaseh-*

## APPENDIX B: SPSS OUTPUT

### 1 RELIABILITY ANALYSIS DURING PILOT TEST

#### 1.1 RELIABILITY ANALYSIS DURING PILOT TEST FOR ORGANIZATIONAL CLIMATE

| Reliability Statistics |                                              |            |
|------------------------|----------------------------------------------|------------|
| Cronbach's Alpha       | Cronbach's Alpha Based on Standardized Items | N of Items |
| .644                   | .701                                         | 17         |

#### 1.2 RELIABILITY ANALYSIS DURING PILOT TEST FOR HIGH PERFORMANCE WORK SYSTEMS

| Reliability Statistics |                                              |            |
|------------------------|----------------------------------------------|------------|
| Cronbach's Alpha       | Cronbach's Alpha Based on Standardized Items | N of Items |
| .796                   | .829                                         | 13         |

### 1.3 RELIABILITY ANALYSIS DURING PILOT TEST FOR HUMAN RESOURCE PRACTICES

| Reliability Statistics |                                              |            |
|------------------------|----------------------------------------------|------------|
| Cronbach's Alpha       | Cronbach's Alpha Based on Standardized Items | N of Items |
| .910                   | .910                                         | 26         |

## 2 THE RELIABILITY ANALYSIS FOR THE REAL SURVEY ON 261 SAMPLES

### 2.1 RELIABILITY ANALYSIS FOR ORGANIZATIONAL CLIMATE

| Reliability Statistics |                                              |            |
|------------------------|----------------------------------------------|------------|
| Cronbach's Alpha       | Cronbach's Alpha Based on Standardized Items | N of Items |
| .358                   | .439                                         | 17         |

### RELIABILITY ANALYSIS FOR ORGANIZATIONAL CLIMATE AFTER ITEM OC14 WAS DELETED

| Reliability Statistics |                                              |            |
|------------------------|----------------------------------------------|------------|
| Cronbach's Alpha       | Cronbach's Alpha Based on Standardized Items | N of Items |
| .459                   | .510                                         | 16         |

## RELIABILITY ANALYSIS FOR ORGANIZATIONAL CLIMATE AFTER ITEM OC20 WAS DELETED

| Reliability Statistics |                                              |            |
|------------------------|----------------------------------------------|------------|
| Cronbach's Alpha       | Cronbach's Alpha Based on Standardized Items | N of Items |
| .570                   | .580                                         | 15         |

## RELIABILITY ANALYSIS FOR ORGANIZATIONAL CLIMATE AFTER ITEM OC18 WAS DELETED

| Reliability Statistics |                                              |            |
|------------------------|----------------------------------------------|------------|
| Cronbach's Alpha       | Cronbach's Alpha Based on Standardized Items | N of Items |
| .654                   | .645                                         | 14         |

## 2.2 RELIABILITY ANALYSIS FOR HUMAN RESOURCE PRACTICES

| Reliability Statistics |                                              |            |
|------------------------|----------------------------------------------|------------|
| Cronbach's Alpha       | Cronbach's Alpha Based on Standardized Items | N of Items |
| .899                   | .890                                         | 26         |

## 2.3RELIABILITY ANALYSIS FOR HIGH PERFORMANCE WORK SYSTEMS

| Reliability Statistics |                                              |            |
|------------------------|----------------------------------------------|------------|
| Cronbach's Alpha       | Cronbach's Alpha Based on Standardized Items | N of Items |
| .780                   | .812                                         | 13         |

## 3.3 FACTOR ANALYSIS

### 3.1 FACTOR ANALYSIS FOR ORGANIZATIONAL CLIMATE

| KMO and Bartlett's Test                          |                    |         |
|--------------------------------------------------|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .795    |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 907.681 |
|                                                  | df                 | 91      |
|                                                  | Sig.               | .000    |

| Anti-image Matrices for Organizational Climate |      |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|------------------------------------------------|------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                                                |      | OC1               | OC2               | OC3               | OC4               | OC5               | OC6               | OC7               | OC8               | OC15              | OC16              | OC17              | OC19              | OC21              | OC22              |
| Anti-image<br>Covariance                       | OC1  | .583              | -.263             | -.093             | -.076             | -.013             | -.024             | .012              | .025              | -.061             | -.003             | -.099             | .019              | .075              | .004              |
|                                                | OC2  | -.263             | .653              | .009              | -.077             | .003              | .050              | -.055             | -.090             | -.063             | -.036             | -.012             | -.047             | .007              | -.047             |
|                                                | OC3  | -.093             | .009              | .657              | -.191             | .026              | -.122             | -.073             | -.055             | -.076             | -.027             | -.045             | -.027             | -.027             | .036              |
|                                                | OC4  | -.076             | -.077             | -.191             | .681              | -.080             | -.086             | -.012             | .086              | .007              | .027              | .003              | -.013             | .001              | .091              |
|                                                | OC5  | -.013             | .003              | .026              | -.080             | .621              | -.008             | -.174             | -.094             | -.207             | .011              | -.038             | .017              | -.028             | .017              |
|                                                | OC6  | -.024             | .050              | -.122             | -.086             | -.008             | .679              | -.166             | -.084             | -.013             | .084              | -.034             | .072              | .042              | -.024             |
|                                                | OC7  | .012              | -.055             | -.073             | -.012             | -.174             | -.166             | .674              | -.089             | -.014             | -.008             | .087              | .037              | .031              | -.085             |
|                                                | OC8  | .025              | -.090             | -.055             | .086              | -.094             | -.084             | -.089             | .754              | -.121             | -.050             | .000              | .027              | -.064             | .071              |
|                                                | OC15 | -.061             | -.063             | -.076             | .007              | -.207             | -.013             | -.014             | -.121             | .589              | .069              | -.099             | -.044             | .065              | -.018             |
|                                                | OC16 | -.003             | -.036             | -.027             | .027              | .011              | .084              | -.008             | -.050             | .069              | .778              | .113              | -.180             | .054              | -.108             |
|                                                | OC17 | -.099             | -.012             | -.045             | .003              | -.038             | -.034             | .087              | .000              | -.099             | .113              | .854              | .000              | -.005             | -.055             |
|                                                | OC19 | .019              | -.047             | -.027             | -.013             | .017              | .072              | .037              | .027              | -.044             | -.180             | .000              | .623              | -.173             | -.134             |
|                                                | OC21 | .075              | .007              | -.027             | .001              | -.028             | .042              | .031              | -.064             | .065              | .054              | -.005             | -.173             | .586              | -.245             |
|                                                | OC22 | .004              | -.047             | .036              | .091              | .017              | -.024             | -.085             | .071              | -.018             | -.108             | -.055             | -.134             | -.245             | .578              |
| Anti-image<br>Correlation                      | OC1  | .802 <sup>a</sup> | -.425             | -.150             | -.121             | -.021             | -.038             | .019              | .038              | -.104             | -.004             | -.140             | .032              | .128              | .007              |
|                                                | OC2  | -.425             | .750 <sup>a</sup> | .014              | -.115             | .005              | .075              | -.082             | -.129             | -.101             | -.050             | -.016             | -.074             | .012              | -.077             |
|                                                | OC3  | -.150             | .014              | .844 <sup>a</sup> | -.286             | .041              | -.182             | -.110             | -.078             | -.121             | -.038             | -.061             | -.042             | -.044             | .059              |
|                                                | OC4  | -.121             | -.115             | -.286             | .834 <sup>a</sup> | -.122             | -.127             | -.018             | .120              | .010              | .037              | .004              | -.021             | .001              | .145              |
|                                                | OC5  | -.021             | .005              | .041              | -.122             | .816 <sup>a</sup> | -.012             | -.269             | -.138             | -.342             | .016              | -.052             | .027              | -.046             | .028              |
|                                                | OC6  | -.038             | .075              | -.182             | -.127             | -.012             | .852 <sup>a</sup> | -.245             | -.118             | -.020             | .115              | -.045             | .110              | .067              | -.038             |
|                                                | OC7  | .019              | -.082             | -.110             | -.018             | -.269             | -.245             | .801 <sup>a</sup> | -.125             | -.022             | -.011             | .115              | .058              | .049              | -.136             |
|                                                | OC8  | .038              | -.129             | -.078             | .120              | -.138             | -.118             | -.125             | .812 <sup>a</sup> | -.182             | -.066             | .000              | .040              | -.097             | .108              |
|                                                | OC15 | -.104             | -.101             | -.121             | .010              | -.342             | -.020             | -.022             | -.182             | .835 <sup>a</sup> | .102              | -.139             | -.073             | .111              | -.030             |
|                                                | OC16 | -.004             | -.050             | -.038             | .037              | .016              | .115              | -.011             | -.066             | .102              | .755 <sup>a</sup> | .138              | -.258             | .080              | -.161             |
|                                                | OC17 | -.140             | -.016             | -.061             | .004              | -.052             | -.045             | .115              | .000              | -.139             | .138              | .798 <sup>a</sup> | -.001             | -.006             | -.078             |
|                                                | OC19 | .032              | -.074             | -.042             | -.021             | .027              | .110              | .058              | .040              | -.073             | -.258             | -.001             | .769 <sup>a</sup> | -.287             | -.223             |
|                                                | OC21 | .128              | .012              | -.044             | .001              | -.046             | .067              | .049              | -.097             | .111              | .080              | -.006             | -.287             | .722 <sup>a</sup> | -.421             |
|                                                | OC22 | .007              | -.077             | .059              | .145              | .028              | -.038             | -.136             | .108              | -.030             | -.161             | -.078             | -.223             | -.421             | .710 <sup>a</sup> |
| a. Measures of Sampling Adequacy(MSA)          |      |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |

### Total Variance Explained for Organizational Climate

| Component | Initial Eigenvalues |               |              | Loadings |               |              | Loadings |               |              |
|-----------|---------------------|---------------|--------------|----------|---------------|--------------|----------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total    | % of Variance | Cumulative % | Total    | % of Variance | Cumulative % |
| 1         | 3.896               | 27.832        | 27.832       | 3.896    | 27.832        | 27.832       | 2.436    | 17.402        | 17.402       |
| 2         | 2.014               | 14.385        | 42.217       | 2.014    | 14.385        | 42.217       | 2.378    | 16.986        | 34.388       |
| 3         | 1.220               | 8.716         | 50.932       | 1.220    | 8.716         | 50.932       | 2.316    | 16.544        | 50.932       |
| 4         | 1.044               | 7.461         | 58.393       |          |               |              |          |               |              |
| 5         | .968                | 6.914         | 65.307       |          |               |              |          |               |              |
| 6         | .737                | 5.262         | 70.569       |          |               |              |          |               |              |
| 7         | .723                | 5.167         | 75.736       |          |               |              |          |               |              |
| 8         | .684                | 4.887         | 80.623       |          |               |              |          |               |              |
| 9         | .547                | 3.908         | 84.531       |          |               |              |          |               |              |
| 10        | .513                | 3.665         | 88.196       |          |               |              |          |               |              |
| 11        | .472                | 3.373         | 91.569       |          |               |              |          |               |              |
| 12        | .428                | 3.056         | 94.625       |          |               |              |          |               |              |
| 13        | .397                | 2.835         | 97.460       |          |               |              |          |               |              |
| 14        | .356                | 2.540         | 100.000      |          |               |              |          |               |              |

Extraction Method: Principal Component Analysis.

| Organizational Climate -Rotated Component Matrix <sup>a</sup> |           |      |      |
|---------------------------------------------------------------|-----------|------|------|
|                                                               | Component |      |      |
|                                                               | 1         | 2    | 3    |
| OC7                                                           | .759      |      |      |
| OC5                                                           | .697      |      |      |
| OC8                                                           | .669      |      |      |
| OC6                                                           | .584      |      |      |
| OC15                                                          | .555      |      |      |
| OC22                                                          |           | .801 |      |
| OC19                                                          |           | .791 |      |
| OC21                                                          |           | .748 |      |
| OC16                                                          |           | .564 |      |
| OC1                                                           |           |      | .804 |
| OC2                                                           |           |      | .727 |
| OC4                                                           |           |      | .555 |
| OC3                                                           |           |      | .504 |
| OC17                                                          |           |      |      |
| Extraction Method: Principal Component Analysis.              |           |      |      |
| Rotation Method: Varimax with Kaiser Normalization.           |           |      |      |
| a. Rotation converged in 4 iterations.                        |           |      |      |

### 3.2 FACTOR ANALYSIS FOR HUMAN RESOURCE PRACTICES

#### STEP 1:

| KMO and Bartlett's Test                          |                    |          |
|--------------------------------------------------|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .856     |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 3047.094 |
|                                                  | df                 | 325      |
|                                                  | Sig.               | 0.000    |

| Anti-image Matrices for Human Resource Practices |       |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |       |       |       |       |       |       |       |       |
|--------------------------------------------------|-------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                                  |       | HRP36             | HRP37             | HRP38             | HRP39             | HRP40             | HRP41             | HRP42             | HRP43             | HRP44             | HRP45             | HRP46             | HRP47             | HRP48             | HRP49             | HRP50             | HRP51             | HRP52             | HRP53             | HRP54 | HRP55 | HRP56 | HRP57 | HRP58 | HRP59 | HRP60 | HRP61 |
| Anti-image Covariance                            | HRP36 | .587              | .001              | -.029             | -.120             | -.080             | -.018             | -.037             | .038              | -.044             | -.066             | .123              | -.121             | .006              | .026              | .016              | -.030             | .041              | -.017             | .016  | .039  | -.060 | -.040 | .011  | -.064 | .000  | -.004 |
|                                                  | HRP37 | .001              | .830              | -.008             | -.018             | .068              | .075              | -.029             | .056              | .056              | .050              | -.108             | -.005             | -.012             | -.017             | .013              | -.013             | .020              | .035              | -.034 | .009  | -.036 | .054  | .040  | -.021 | .080  | -.083 |
|                                                  | HRP38 | -.029             | -.008             | .617              | -.097             | .058              | -.069             | .068              | -.053             | .081              | -.114             | .003              | -.043             | .058              | -.045             | -.136             | .012              | .058              | -.050             | -.006 | -.049 | -.045 | .098  | -.026 | .057  | -.060 | -.032 |
|                                                  | HRP39 | -.120             | -.018             | -.097             | .452              | -.009             | .015              | -.021             | -.129             | -.100             | -.036             | -.005             | .009              | -.007             | .090              | .036              | .026              | .005              | .075              | -.014 | -.050 | -.065 | -.023 | -.074 | .033  | -.021 | .014  |
|                                                  | HRP40 | -.080             | .068              | .058              | -.009             | .561              | -.067             | -.062             | -.065             | .004              | -.055             | -.043             | -.071             | -.013             | .003              | -.035             | .024              | .027              | .057              | -.114 | -.108 | -.022 | .024  | -.055 | .060  | -.051 | .055  |
|                                                  | HRP41 | -.018             | .075              | -.069             | .015              | -.067             | .488              | .002              | -.022             | -.052             | -.113             | -.095             | -.026             | -.108             | .115              | .002              | .012              | -.058             | .076              | -.004 | .046  | .023  | .015  | -.037 | -.114 | .047  | -.056 |
|                                                  | HRP42 | -.037             | -.029             | .068              | -.021             | -.062             | .002              | .595              | -.091             | -.035             | -.002             | .036              | -.110             | .033              | -.045             | -.049             | -.006             | .043              | .006              | .070  | -.092 | .013  | -.044 | .017  | -.041 | -.055 | .021  |
|                                                  | HRP43 | .038              | .056              | -.053             | -.129             | -.065             | -.022             | -.091             | .482              | .029              | .091              | .015              | -.045             | .001              | -.037             | -.023             | .055              | -.035             | -.048             | .024  | .002  | -.054 | -.015 | .000  | -.008 | .027  | -.058 |
|                                                  | HRP44 | -.044             | .056              | .081              | -.100             | .004              | -.052             | -.035             | .029              | .504              | .040              | -.171             | .004              | .005              | -.077             | -.058             | -.016             | .007              | -.075             | .071  | -.023 | .020  | .006  | .068  | .023  | .018  | -.064 |
|                                                  | HRP45 | -.066             | .050              | -.114             | -.036             | -.055             | -.113             | -.002             | .091              | .040              | .671              | -.039             | .070              | .154              | -.182             | .062              | .006              | -.047             | -.084             | -.079 | .008  | .029  | -.054 | -.006 | .021  | .068  | -.023 |
|                                                  | HRP46 | .123              | -.108             | .003              | -.005             | -.043             | -.095             | .036              | .015              | -.171             | -.039             | .370              | -.101             | -.001             | .014              | .044              | .009              | .006              | -.042             | -.054 | -.076 | -.001 | -.108 | -.036 | .046  | -.041 | .012  |
|                                                  | HRP47 | -.121             | -.005             | -.043             | .009              | -.071             | -.026             | -.110             | -.045             | .004              | .070              | -.101             | .504              | -.034             | .037              | .028              | .005              | -.041             | -.085             | -.056 | .024  | -.004 | -.019 | -.005 | -.033 | .067  | .023  |
|                                                  | HRP48 | .006              | -.012             | .058              | -.007             | -.013             | -.108             | .033              | .001              | .005              | .154              | -.001             | -.034             | .435              | -.272             | .017              | -.054             | .049              | .029              | -.053 | -.017 | -.089 | .075  | -.075 | .103  | -.033 | -.025 |
|                                                  | HRP49 | .026              | -.017             | -.045             | .090              | .003              | .115              | -.045             | -.037             | -.077             | -.182             | .014              | .037              | -.272             | .440              | -.007             | .050              | -.025             | .039              | -.085 | .001  | .054  | -.039 | -.040 | -.030 | .027  | -.017 |
|                                                  | HRP50 | .016              | .013              | -.136             | .036              | -.035             | .002              | -.049             | -.023             | -.058             | .062              | .044              | .028              | .017              | -.007             | .367              | -.143             | -.079             | .058              | -.057 | -.015 | -.052 | -.046 | -.029 | -.010 | .062  | -.049 |
|                                                  | HRP51 | -.030             | -.013             | .012              | .026              | .024              | .012              | -.006             | .055              | -.016             | .006              | .009              | .005              | -.054             | .050              | -.143             | .375              | -.152             | -.029             | -.067 | .016  | .038  | .020  | -.010 | -.073 | -.017 | .005  |
|                                                  | HRP52 | .041              | .020              | .058              | .005              | .027              | -.058             | .043              | -.035             | .007              | -.047             | .006              | -.041             | .049              | -.025             | -.079             | -.152             | .304              | -.016             | .104  | -.070 | -.059 | -.001 | -.006 | .105  | -.127 | .035  |
|                                                  | HRP53 | -.017             | .035              | -.050             | .075              | .057              | .076              | .006              | -.048             | -.075             | -.084             | -.042             | -.085             | .029              | .039              | .058              | -.029             | -.016             | .518              | -.062 | -.006 | -.080 | -.028 | -.093 | .021  | -.086 | .014  |
|                                                  | HRP54 | .016              | -.034             | -.006             | -.014             | -.114             | -.004             | .070              | .024              | .071              | -.079             | -.054             | -.056             | -.053             | -.085             | -.057             | -.067             | .104              | -.062             | .724  | .088  | -.028 | .001  | .067  | -.055 | -.004 | .027  |
|                                                  | HRP55 | .039              | .009              | -.049             | -.050             | -.108             | .046              | -.092             | .002              | -.023             | .008              | -.076             | .024              | -.017             | .001              | -.015             | .016              | -.070             | -.006             | .088  | .523  | .002  | .014  | -.014 | -.132 | .064  | -.034 |
|                                                  | HRP56 | -.060             | -.036             | -.045             | -.065             | -.022             | .023              | .013              | -.054             | .020              | .029              | -.001             | -.004             | -.089             | .054              | -.052             | .038              | -.059             | -.080             | -.028 | .002  | .405  | -.109 | .011  | -.094 | .024  | .005  |
|                                                  | HRP57 | -.040             | .054              | .098              | -.023             | .024              | .015              | -.044             | -.015             | .006              | -.054             | -.108             | -.019             | .075              | -.039             | -.046             | .020              | -.001             | -.028             | .001  | .014  | -.109 | .455  | -.025 | .012  | -.026 | -.064 |
|                                                  | HRP58 | .011              | .040              | -.026             | -.074             | -.055             | -.037             | .017              | .000              | .068              | -.006             | -.036             | -.005             | -.075             | -.040             | -.029             | -.010             | -.006             | -.093             | .067  | -.014 | .011  | -.025 | .417  | -.100 | -.033 | -.036 |
|                                                  | HRP59 | -.064             | -.021             | .057              | .033              | .060              | -.114             | -.041             | -.008             | .023              | .021              | .046              | -.033             | .103              | -.030             | -.010             | -.073             | .105              | .021              | -.055 | -.132 | -.094 | .012  | -.100 | .442  | -.053 | -.073 |
|                                                  | HRP60 | .000              | .080              | -.060             | -.021             | -.051             | .047              | -.055             | .027              | .018              | .068              | -.041             | .067              | -.033             | .027              | .062              | -.017             | -.127             | -.086             | -.004 | .064  | .024  | -.026 | -.033 | -.053 | .380  | -.154 |
|                                                  | HRP61 | -.004             | -.083             | -.032             | .014              | .055              | -.056             | .021              | -.058             | -.064             | -.023             | .012              | .023              | -.025             | -.017             | -.049             | .005              | .035              | .014              | .027  | -.034 | .005  | -.064 | -.036 | -.073 | -.154 | .418  |
| Anti-image Correlation                           | HRP36 | .857 <sup>a</sup> | .001              | -.049             | -.233             | -.139             | -.033             | -.062             | .071              | -.080             | -.106             | .265              | -.222             | .012              | .051              | .035              | -.064             | .096              | -.032             | .024  | .071  | -.123 | -.078 | .023  | -.126 | .000  | -.008 |
|                                                  | HRP37 | .001              | .772 <sup>a</sup> | -.012             | -.029             | .100              | .117              | -.041             | .088              | .087              | .067              | -.195             | -.008             | -.019             | -.028             | .024              | -.023             | .040              | .053              | -.044 | .014  | -.063 | .089  | .069  | -.034 | .142  | -.140 |
|                                                  | HRP38 | -.049             | -.012             | .821 <sup>a</sup> | -.183             | .099              | -.126             | .112              | -.097             | .146              | -.177             | .007              | -.077             | .111              | -.087             | -.286             | .025              | .133              | -.088             | -.009 | -.085 | -.091 | .186  | -.052 | .108  | -.123 | -.063 |
|                                                  | HRP39 | -.233             | -.029             | -.183             | .890 <sup>a</sup> | -.017             | .031              | -.040             | -.278             | -.210             | -.066             | -.013             | .018              | -.017             | .203              | .088              | .064              | .013              | .155              | -.024 | -.103 | -.153 | -.050 | -.171 | .074  | -.050 | .033  |
|                                                  | HRP40 | -.139             | .100              | .099              | -.017             | .895 <sup>a</sup> | -.127             | -.108             | -.124             | .007              | -.090             | -.095             | -.133             | -.026             | .006              | -.077             | .053              | .066              | .107              | -.179 | -.200 | -.045 | .048  | -.113 | .121  | -.111 | .114  |
|                                                  | HRP41 | -.033             | .117              | -.126             | .031              | -.127             | .873 <sup>a</sup> | .004              | -.045             | -.105             | -.198             | -.223             | -.052             | -.235             | .249              | .006              | .028              | -.151             | .150              | -.007 | .090  | .052  | .033  | -.083 | -.245 | .110  | -.125 |
|                                                  | HRP42 | -.062             | -.041             | .112              | -.040             | -.108             | .004              | .916 <sup>a</sup> | -.170             | -.064             | -.003             | .076              | -.201             | .064              | -.088             | -.104             | -.014             | .102              | .012              | .106  | -.165 | .026  | -.085 | .033  | -.080 | -.115 | .041  |
|                                                  | HRP43 | .071              | .088              | -.097             | -.278             | -.124             | -.045             | -.170             | .922 <sup>a</sup> | .060              | .161              | .035              | -.092             | .003              | -.081             | -.055             | .130              | -.090             | -.095             | .041  | .005  | -.123 | -.033 | .001  | -.017 | .063  | -.129 |
|                                                  | HRP44 | -.080             | .087              | .146              | -.210             | .007              | -.105             | -.064             | .060              | .862 <sup>a</sup> | .068              | -.395             | .008              | .010              | -.163             | -.135             | -.037             | .017              | -.146             | .118  | -.044 | .044  | .013  | .148  | .049  | .040  | -.138 |
|                                                  | HRP45 | -.106             | .067              | -.177             | -.066             | -.090             | -.198             | -.003             | .161              | .068              | .479 <sup>a</sup> | -.079             | .121              | .286              | -.335             | .125              | .013              | -.104             | -.142             | -.113 | .013  | .055  | -.098 | -.012 | .039  | .135  | -.043 |
|                                                  | HRP46 | .265              | -.195             | .007              | -.013             | -.095             | -.223             | .076              | .035              | -.395             | -.079             | .835 <sup>a</sup> | -.235             | -.003             | .034              | .121              | .025              | .018              | -.097             | -.105 | -.172 | -.003 | -.265 | -.093 | .114  | -.109 | .031  |
|                                                  | HRP47 | -.222             | -.008             | -.077             | .018              | -.133             | -.052             | -.201             | -.092             | .008              | .121              | -.235             | .905 <sup>a</sup> | -.073             | .079              | .066              | .011              | -.104             | -.167             | -.092 | .046  | -.009 | -.040 | -.011 | -.070 | .154  | .051  |
|                                                  | HRP48 | .012              | -.019             | .111              | -.017             | -.026             | -.235             | .064              | .003              | .010              | .286              | -.003             | -.073             | .478 <sup>a</sup> | -.623             | .042              | -.133             | .135              | .062              | -.094 | -.035 | -.212 | .168  | -.176 | .234  | -.081 | -.059 |
|                                                  | HRP49 | .051              | -.028             | -.087             | .203              | .006              | .249              | -.088             | -.081             | -.163             | -.335             | .034              | .079              | -.623             | .441 <sup>a</sup> | -.017             | .123              | -.068             | .082              | -.151 | .003  | .128  | -.086 | -.093 | -.067 | .066  | -.040 |
|                                                  | HRP50 | .035              | .024              | -.286             | .088              | -.077             | .006              | -.104             | -.055             | -.135             | .125              | .121              | .066              | .042              | -.017             | .861 <sup>a</sup> | -.384             | -.235             | .132              | -.110 | -.035 | -.135 | -.113 | -.075 | -.024 | .166  | -.125 |
|                                                  | HRP51 | -.064             | -.023             | .025              | .064              | .053              | .028              | -.014             | .130              | -.037             | .013              | .025              | .011              | -.133             | .123              | -.384             | .817 <sup>a</sup> | -.449             | -.066             | -.128 | .036  | .098  | .050  | -.026 | -.179 | -.046 | .012  |
|                                                  | HRP52 | .096              | .040              | .133              | .013              | .066              | -.151             | .102              | -.090             | .017              | -.104             | .018              | -.104             | .135              | -.068             | -.235             | -.449             | .802 <sup>a</sup> | -.041             | .222  | -.175 | -.169 | -.002 | -.018 | .285  | -.372 | .098  |
|                                                  | HRP53 | -.032             | .053              | -.088             | .155              | .107              | .150              | .012              | -.095             | -.146             | -.142             | -.097             | -.167             | .062              | .082              | .132              | -.066             | -.041             | .893 <sup>a</sup> | -.10. |       |       |       |       |       |       |       |

**Total Variance Explained for Human Resource Practices**

| Component | Initial Eigenvalues |               |              | Loadings |               |              | Loadings |               |              |
|-----------|---------------------|---------------|--------------|----------|---------------|--------------|----------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total    | % of Variance | Cumulative % | Total    | % of Variance | Cumulative % |
| 1         | 8.339               | 32.073        | 32.073       | 8.339    | 32.073        | 32.073       | 5.839    | 22.459        | 22.459       |
| 2         | 2.029               | 7.805         | 39.878       | 2.029    | 7.805         | 39.878       | 4.333    | 16.666        | 39.125       |
| 3         | 1.842               | 7.085         | 46.964       | 1.842    | 7.085         | 46.964       | 2.038    | 7.839         | 46.964       |
| 4         | 1.324               | 5.092         | 52.056       |          |               |              |          |               |              |
| 5         | 1.264               | 4.863         | 56.918       |          |               |              |          |               |              |
| 6         | 1.043               | 4.012         | 60.930       |          |               |              |          |               |              |
| 7         | 1.006               | 3.869         | 64.799       |          |               |              |          |               |              |
| 8         | .913                | 3.512         | 68.311       |          |               |              |          |               |              |
| 9         | .873                | 3.358         | 71.669       |          |               |              |          |               |              |
| 10        | .806                | 3.099         | 74.767       |          |               |              |          |               |              |
| 11        | .716                | 2.754         | 77.521       |          |               |              |          |               |              |
| 12        | .652                | 2.509         | 80.030       |          |               |              |          |               |              |
| 13        | .601                | 2.310         | 82.340       |          |               |              |          |               |              |
| 14        | .583                | 2.243         | 84.582       |          |               |              |          |               |              |
| 15        | .569                | 2.189         | 86.771       |          |               |              |          |               |              |
| 16        | .461                | 1.775         | 88.546       |          |               |              |          |               |              |
| 17        | .424                | 1.631         | 90.176       |          |               |              |          |               |              |
| 18        | .410                | 1.577         | 91.753       |          |               |              |          |               |              |
| 19        | .398                | 1.530         | 93.283       |          |               |              |          |               |              |
| 20        | .333                | 1.280         | 94.564       |          |               |              |          |               |              |
| 21        | .311                | 1.197         | 95.760       |          |               |              |          |               |              |
| 22        | .265                | 1.020         | 96.781       |          |               |              |          |               |              |
| 23        | .252                | .969          | 97.750       |          |               |              |          |               |              |
| 24        | .216                | .832          | 98.582       |          |               |              |          |               |              |
| 25        | .209                | .806          | 99.388       |          |               |              |          |               |              |
| 26        | .159                | .612          | 100.000      |          |               |              |          |               |              |

Extraction Method: Principal Component Analysis.

As there are 3 items that have an 'a-square' which is below 0.50, another factor analysis will be conducted.

Factor Analysis Human Resource Practices- STEP 2

| KMO and Bartlett's Test                          |                    |          |
|--------------------------------------------------|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .891     |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 2698.984 |
|                                                  | df                 | 253      |
|                                                  | Sig.               | 0.000    |

| Anti-image Matrices for human resource practices step 2 |       |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|---------------------------------------------------------|-------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                                                         |       | HRP36             | HRP37             | HRP38             | HRP39             | HRP40             | HRP41             | HRP42             | HRP43             | HRP44             | HRP46             | HRP47             | HRP50             | HRP51             | HRP52             | HRP53             | HRP54             | HRP55             | HRP56             | HRP57             | HRP58             | HRP59             | HRP60             | HRP61             |
| Anti-image Covariance                                   | HRP36 | .596              | .009              | -.047             | -.141             | -.086             | -.030             | -.038             | .052              | -.036             | .121              | -.119             | .022              | -.029             | .035              | -.034             | .022              | .042              | -.057             | -.053             | .024              | -.076             | .009              | -.002             |
|                                                         | HRP37 | .009              | .837              | .003              | -.011             | .072              | .089              | -.029             | .048              | .051              | -.106             | -.012             | .010              | -.016             | .028              | .049              | -.043             | .007              | -.047             | .067              | .035              | -.016             | .077              | -.086             |
|                                                         | HRP38 | -.047             | .003              | .659              | -.107             | .051              | -.078             | .062              | -.040             | .091              | -.005             | -.019             | -.136             | .029              | .041              | -.078             | -.031             | -.047             | -.023             | .080              | -.025             | .049              | -.040             | -.039             |
|                                                         | HRP39 | -.141             | -.011             | -.107             | .481              | -.009             | -.003             | -.014             | -.129             | -.085             | -.011             | .004              | .038              | .022              | .003              | .063              | .026              | -.050             | -.074             | -.028             | -.057             | .027              | -.025             | .026              |
|                                                         | HRP40 | -.086             | .072              | .051              | -.009             | .566              | -.082             | -.065             | -.061             | .004              | -.047             | -.066             | -.030             | .026              | .024              | .056              | -.142             | -.109             | -.020             | .021              | -.066             | .069              | -.047             | .053              |
|                                                         | HRP41 | -.030             | .089              | -.078             | -.003             | -.082             | .533              | .014              | -.008             | -.042             | -.111             | -.032             | .013              | -.001             | -.061             | .074              | -.008             | .048              | .009              | .028              | -.050             | -.111             | .053              | -.066             |
|                                                         | HRP42 | -.038             | -.029             | .062              | -.014             | -.065             | .014              | .601              | -.096             | -.044             | .036              | -.108             | -.049             | .000              | .040              | .007              | .067              | -.092             | .023              | -.055             | .016              | -.049             | -.051             | .019              |
|                                                         | HRP43 | .052              | .048              | -.040             | -.129             | -.061             | -.008             | -.096             | .498              | .019              | .022              | -.058             | -.032             | .057              | -.027             | -.032             | .025              | .000              | -.068             | -.004             | -.012             | -.003             | .018              | -.062             |
|                                                         | HRP44 | -.036             | .051              | .091              | -.085             | .004              | -.042             | -.044             | .019              | .525              | -.175             | .007              | -.062             | -.013             | .010              | -.063             | .049              | -.026             | .021              | .011              | .052              | .035              | .019              | -.076             |
|                                                         | HRP46 | .121              | -.106             | -.005             | -.011             | -.047             | -.111             | .036              | .022              | -.175             | .372              | -.101             | .049              | .010              | .002              | -.052             | -.061             | -.075             | .002              | -.120             | -.037             | .048              | -.038             | .012              |
|                                                         | HRP47 | -.119             | -.012             | -.019             | .004              | -.066             | -.032             | -.108             | -.058             | .007              | -.101             | .521              | .022              | -.005             | -.030             | -.081             | -.044             | .022              | -.022             | -.002             | -.005             | -.029             | .056              | .028              |
|                                                         | HRP50 | .022              | .010              | -.136             | .038              | -.030             | .013              | -.049             | -.032             | -.062             | .049              | .022              | .374              | -.150             | -.079             | .067              | -.050             | -.016             | -.059             | -.045             | -.028             | -.015             | .058              | -.047             |
|                                                         | HRP51 | -.029             | -.016             | .029              | .022              | .026              | -.001             | .000              | .057              | -.013             | .010              | -.005             | -.150             | .384              | -.153             | -.027             | -.069             | .014              | .027              | .036              | -.016             | -.068             | -.028             | .005              |
|                                                         | HRP52 | .035              | .028              | .041              | .003              | .024              | -.061             | .040              | -.027             | .010              | .002              | -.030             | -.079             | -.153             | .317              | -.032             | .119              | -.070             | -.047             | -.019             | .004              | .102              | -.124             | .038              |
|                                                         | HRP53 | -.034             | .049              | -.078             | .063              | .056              | .074              | .007              | -.032             | -.063             | -.052             | -.081             | .067              | -.027             | -.032             | .544              | -.053             | -.002             | -.073             | -.050             | -.082             | .006              | -.081             | .021              |
|                                                         | HRP54 | .022              | -.043             | -.031             | .026              | -.142             | -.008             | .067              | .025              | .049              | -.061             | -.044             | -.050             | -.069             | .119              | -.053             | .807              | .094              | -.035             | .001              | .024              | -.034             | .010              | .006              |
|                                                         | HRP55 | .042              | .007              | -.047             | -.050             | -.109             | .048              | -.092             | .000              | -.026             | -.075             | .022              | -.016             | .014              | -.070             | -.002             | .094              | .524              | -.003             | .020              | -.022             | -.136             | .064              | -.036             |
|                                                         | HRP56 | -.057             | -.047             | -.023             | -.074             | -.020             | .009              | .023              | -.068             | .021              | .002              | -.022             | -.059             | .027              | -.047             | -.073             | -.035             | -.003             | .431              | -.097             | -.005             | -.083             | .010              | .003              |
|                                                         | HRP57 | -.053             | .067              | .080              | -.028             | .021              | .028              | -.055             | -.004             | .011              | -.120             | -.002             | -.045             | .036              | -.019             | -.050             | .001              | .020              | -.097             | .479              | -.012             | -.009             | -.011             | -.067             |
|                                                         | HRP58 | .024              | .035              | -.025             | -.057             | -.066             | -.050             | .016              | -.012             | .052              | -.037             | -.005             | -.028             | -.016             | .004              | -.082             | .024              | -.022             | -.005             | -.012             | .462              | -.084             | -.041             | -.058             |
|                                                         | HRP59 | -.076             | -.016             | .049              | .027              | .069              | -.111             | -.049             | -.003             | .035              | .048              | -.029             | -.015             | -.068             | .102              | .006              | -.034             | -.136             | -.083             | -.009             | -.084             | .473              | -.050             | -.068             |
|                                                         | HRP60 | .009              | .077              | -.040             | -.025             | -.047             | .053              | -.051             | .018              | .019              | -.038             | .056              | .058              | -.028             | -.124             | -.081             | .010              | .064              | .010              | -.011             | -.041             | -.050             | .395              | -.160             |
|                                                         | HRP61 | -.002             | -.086             | -.039             | .026              | .053              | -.066             | .019              | -.062             | -.076             | .012              | .028              | -.047             | .005              | .038              | .021              | .006              | -.036             | .003              | -.067             | -.058             | -.068             | -.160             | .425              |
| Anti-image Correlation                                  | HRP36 | .849 <sup>a</sup> | .012              | -.074             | -.263             | -.149             | -.054             | -.063             | .096              | -.065             | .257              | -.213             | .047              | -.061             | .080              | -.060             | .032              | .076              | -.113             | -.100             | .046              | -.144             | .018              | -.005             |
|                                                         | HRP37 | .012              | .766 <sup>a</sup> | .005              | -.017             | .105              | .133              | -.041             | .075              | .077              | -.190             | -.018             | .017              | -.028             | .055              | .073              | -.052             | .011              | -.078             | .106              | .056              | -.025             | .133              | -.145             |
|                                                         | HRP38 | -.074             | .005              | .858 <sup>a</sup> | -.191             | .084              | -.132             | .099              | -.069             | .155              | -.009             | -.033             | -.274             | .058              | .089              | -.130             | -.043             | -.081             | -.042             | .142              | -.045             | .088              | -.078             | -.073             |
|                                                         | HRP39 | -.263             | -.017             | -.191             | .908 <sup>a</sup> | -.016             | -.007             | -.025             | -.263             | -.168             | -.025             | .009              | .091              | .052              | .009              | .123              | .042              | -.100             | -.163             | -.058             | -.120             | .057              | -.057             | .058              |
|                                                         | HRP40 | -.149             | .105              | .084              | -.016             | .891 <sup>a</sup> | -.149             | -.111             | -.115             | .008              | -.102             | -.122             | -.066             | .057              | .058              | .101              | -.210             | -.201             | -.041             | .041              | -.129             | .133              | -.100             | .108              |
|                                                         | HRP41 | -.054             | .133              | -.132             | -.007             | -.149             | .910 <sup>a</sup> | .024              | -.016             | -.079             | -.249             | -.061             | .030              | -.002             | -.148             | .138              | -.012             | .091              | .018              | .056              | -.101             | -.220             | .115              | -.138             |
|                                                         | HRP42 | -.063             | -.041             | .099              | -.025             | -.111             | .024              | .921 <sup>a</sup> | -.175             | -.078             | .077              | -.192             | -.103             | .000              | .092              | .013              | .096              | -.165             | .045              | -.103             | .030              | -.092             | -.105             | .038              |
|                                                         | HRP43 | .096              | .075              | -.069             | -.263             | -.115             | -.016             | -.175             | .934 <sup>a</sup> | .037              | .051              | -.115             | -.074             | .130              | -.069             | -.062             | .039              | -.001             | -.148             | -.009             | -.024             | -.007             | .041              | -.135             |
|                                                         | HRP44 | -.065             | .077              | .155              | -.168             | .008              | -.079             | -.078             | .037              | .882 <sup>a</sup> | -.395             | .014              | -.140             | -.028             | .025              | -.117             | .075              | -.050             | .044              | .021              | .106              | .071              | .042              | -.161             |
|                                                         | HRP46 | .257              | -.190             | -.009             | -.025             | -.102             | -.249             | .077              | .051              | -.395             | .828 <sup>a</sup> | -.229             | .131              | .028              | .007              | -.116             | -.112             | -.170             | .005              | -.285             | -.089             | .114              | -.099             | .031              |
|                                                         | HRP47 | -.213             | -.018             | -.033             | .009              | -.122             | -.061             | -.192             | -.115             | .014              | -.229             | .923 <sup>a</sup> | .050              | -.012             | -.074             | -.153             | -.069             | .043              | -.046             | -.004             | -.011             | -.059             | .123              | .060              |
|                                                         | HRP50 | .047              | .017              | -.274             | .091              | -.066             | .030              | -.103             | -.074             | -.140             | .131              | .050              | .865 <sup>a</sup> | -.396             | -.230             | .149              | -.090             | -.036             | -.147             | -.106             | -.067             | -.035             | .152              | -.117             |
|                                                         | HRP51 | -.061             | -.028             | .058              | .052              | .057              | -.002             | .000              | .130              | -.028             | .028              | -.012             | -.396             | .829 <sup>a</sup> | -.437             | -.058             | -.125             | .032              | .065              | .084              | -.037             | -.160             | -.071             | .013              |
|                                                         | HRP52 | .080              | .055              | .089              | .009              | .058              | -.148             | .092              | -.069             | .025              | .007              | -.074             | -.230             | -.437             | .824 <sup>a</sup> | -.077             | .236              | -.171             | -.128             | -.049             | .010              | .264              | -.350             | .104              |
|                                                         | HRP53 | -.060             | .073              | -.130             | .123              | .101              | .138              | .013              | -.062             | -.117             | -.116             | -.153             | .149              | -.058             | -.077             | .911 <sup>a</sup> | -.080             | -.003             | -.151             | -.098             | -.163             | .012              | -.175             | .043              |
|                                                         | HRP54 | .032              | -.052             | -.043             | .042              | -.210             | -.012             | .096              | .039              | .075              | -.112             | -.069             | -.090             | -.125             | .236              | -.080             | .408 <sup>a</sup> | .144              | -.059             | .001              | .039              | -.054             | .018              | .010              |
|                                                         | HRP55 | .076              | .011              | -.081             | -.100             | -.201             | .091              | -.165             | -.001             | -.050             | -.170             | .043              | -.036             | .032              | -.171             | -.003             | .144              | .912 <sup>a</sup> | -.006             | .040              | -.045             | -.273             | .141              | -.077             |
|                                                         | HRP56 | -.113             | -.078             | -.042             | -.163             | -.041             | .018              | .045              | -.148             | .044              | .005              | -.046             | -.147             | .065              | -.128             | -.151             | -.059             | -.006             | .945 <sup>a</sup> | -.213             | -.010             | -.183             | .024              | .006              |
|                                                         | HRP57 | -.100             | .106              | .142              | -.058             | .041              | .056              | -.103             | -.009             | .021              | -.285             | -.004             | -.106             | .084              | -.049             | -.098             | .001              | .040              | -.213             | .933 <sup>a</sup> | -.026             | -.018             | -.026             | -.148             |
|                                                         | HRP58 | .046              | .056              | -.045             | -.120             | -.129             | -.101             | .030              | -.024             | .106              | -.089             | -.011             | -.067             | -.037             | .010              | -.163             | .039              | -.045             | -.010             | -.026             | .959 <sup>a</sup> | -.180             | -.095             | -.130             |
|                                                         | HRP59 | -.144             | -.025             | .088              | .057              | .133              | -.220             | -.092             | -.007             | .071              | .114              | -.059             | -.035             | -.160             | .264              | .012              | -.054             | -.273             | -.183             | -.018             | -.180             | .871 <sup>a</sup> | -.116             | -.153             |
|                                                         | HRP60 | .018              | .133              | -.078             | -.057             | -.100             | .115              | -.105             | .041              | .042              | -.099             | .123              | .152              | -.071             | -.350             | -.175             | .018              | .141              | .024              | -.026             | -.095             | -.116             | .873 <sup>a</sup> | -.391             |
|                                                         | HRP61 | -.005             | -.145             | -.073             | .058              | .108              | -.138             | .038              | -.135             | -.161             | .031              | .060              | -.117             | .013              | .104              | .043              | .010              | -.077             | .006              | -.148             | -.130             | -.153             | -.391             | .904 <sup>a</sup> |

a. Measures of Sampling Adequacy(MSA)

**Total Variance Explained for HRP Step 2**

| Component | Initial Eigenvalues |               |              | Loadings |               |              | Loadings |               |              |
|-----------|---------------------|---------------|--------------|----------|---------------|--------------|----------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total    | % of Variance | Cumulative % | Total    | % of Variance | Cumulative % |
| 1         | 8.290               | 36.042        | 36.042       | 8.290    | 36.042        | 36.042       | 4.251    | 18.484        | 18.484       |
| 2         | 1.886               | 8.201         | 44.243       | 1.886    | 8.201         | 44.243       | 3.847    | 16.725        | 35.209       |
| 3         | 1.346               | 5.852         | 50.095       | 1.346    | 5.852         | 50.095       | 3.424    | 14.887        | 50.095       |
| 4         | 1.187               | 5.159         | 55.254       |          |               |              |          |               |              |
| 5         | 1.034               | 4.495         | 59.749       |          |               |              |          |               |              |
| 6         | .975                | 4.239         | 63.988       |          |               |              |          |               |              |
| 7         | .900                | 3.912         | 67.900       |          |               |              |          |               |              |
| 8         | .874                | 3.798         | 71.698       |          |               |              |          |               |              |
| 9         | .740                | 3.219         | 74.917       |          |               |              |          |               |              |
| 10        | .663                | 2.884         | 77.801       |          |               |              |          |               |              |
| 11        | .598                | 2.598         | 80.399       |          |               |              |          |               |              |
| 12        | .595                | 2.587         | 82.987       |          |               |              |          |               |              |
| 13        | .577                | 2.508         | 85.494       |          |               |              |          |               |              |
| 14        | .488                | 2.124         | 87.618       |          |               |              |          |               |              |
| 15        | .427                | 1.857         | 89.475       |          |               |              |          |               |              |
| 16        | .426                | 1.853         | 91.328       |          |               |              |          |               |              |
| 17        | .401                | 1.743         | 93.071       |          |               |              |          |               |              |
| 18        | .352                | 1.533         | 94.604       |          |               |              |          |               |              |
| 19        | .311                | 1.353         | 95.957       |          |               |              |          |               |              |
| 20        | .277                | 1.204         | 97.161       |          |               |              |          |               |              |
| 21        | .241                | 1.050         | 98.211       |          |               |              |          |               |              |
| 22        | .226                | .983          | 99.194       |          |               |              |          |               |              |
| 23        | .185                | .806          | 100.000      |          |               |              |          |               |              |

Extraction Method: Principal Component Analysis.

As there is still an 'a-square' which is below 0.50, another factor analysis will be conducted.

#### Factor Analysis of Human Resource Practices- STEP 3

| KMO and Bartlett's Test                          |                    |          |
|--------------------------------------------------|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .895     |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 2648.691 |
|                                                  | df                 | 231      |
|                                                  | Sig.               | 0.000    |

| Anti-image Matrices for HRP Step 3 |       |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|------------------------------------|-------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                                    |       | HRP36             | HRP37             | HRP38             | HRP39             | HRP40             | HRP41             | HRP42             | HRP43             | HRP44             | HRP46             | HRP47             | HRP50             | HRP51             | HRP52             | HRP53             | HRP55             | HRP56             | HRP57             | HRP58             | HRP59             | HRP60             | HRP61             |
| Anti-image Covariance              | HRP36 | .597              | .010              | -.046             | -.142             | -.086             | -.030             | -.040             | .052              | -.038             | .125              | -.118             | .024              | -.028             | .034              | -.033             | .041              | -.056             | -.054             | .024              | -.076             | .008              | -.002             |
|                                    | HRP37 | .010              | .839              | .002              | -.009             | .068              | .089              | -.026             | .050              | .054              | -.111             | -.015             | .007              | -.020             | .037              | .047              | .012              | -.049             | .067              | .036              | -.017             | .077              | -.086             |
|                                    | HRP38 | -.046             | .002              | .660              | -.107             | .048              | -.079             | .066              | -.039             | .094              | -.007             | -.021             | -.139             | .027              | .048              | -.080             | -.045             | -.024             | .080              | -.024             | .048              | -.040             | -.038             |
|                                    | HRP39 | -.142             | -.009             | -.107             | .482              | -.004             | -.003             | -.016             | -.130             | -.087             | -.009             | .006              | .040              | .025              | .000              | .065              | -.055             | -.074             | -.028             | -.058             | .028              | -.025             | .026              |
|                                    | HRP40 | -.086             | .068              | .048              | -.004             | .592              | -.087             | -.056             | -.059             | .013              | -.061             | -.078             | -.041             | .015              | .050              | .049              | -.099             | -.028             | .022              | -.065             | .066              | -.047             | .056              |
|                                    | HRP41 | -.030             | .089              | -.079             | -.003             | -.087             | .533              | .014              | -.008             | -.041             | -.113             | -.033             | .013              | -.002             | -.063             | .074              | .050              | .008              | .028              | -.050             | -.111             | .053              | -.066             |
|                                    | HRP42 | -.040             | -.026             | .066              | -.016             | -.056             | .014              | .606              | -.099             | -.049             | .042              | -.105             | -.046             | .006              | .032              | .012              | -.103             | .026              | -.056             | .014              | -.047             | -.052             | .019              |
|                                    | HRP43 | .052              | .050              | -.039             | -.130             | -.059             | -.008             | -.099             | .499              | .017              | .024              | -.057             | -.031             | .060              | -.033             | -.031             | -.003             | -.068             | -.004             | -.012             | -.002             | .018              | -.062             |
|                                    | HRP44 | -.038             | .054              | .094              | -.087             | .013              | -.041             | -.049             | .017              | .528              | -.174             | .010              | -.060             | -.009             | .003              | -.060             | -.033             | .023              | .011              | .051              | .038              | .019              | -.077             |
|                                    | HRP46 | .125              | -.111             | -.007             | -.009             | -.061             | -.113             | .042              | .024              | -.174             | .377              | -.106             | .046              | .005              | .012              | -.057             | -.071             | .000              | -.122             | -.035             | .046              | -.038             | .013              |
|                                    | HRP47 | -.118             | -.015             | -.021             | .006              | -.078             | -.033             | -.105             | -.057             | .010              | -.106             | .524              | .020              | -.009             | -.025             | -.085             | .028              | -.024             | -.002             | -.004             | -.031             | .057              | .029              |
|                                    | HRP50 | .024              | .007              | -.139             | .040              | -.041             | .013              | -.046             | -.031             | -.060             | .046              | .020              | .377              | -.158             | -.077             | .065              | -.010             | -.062             | -.045             | -.026             | -.017             | .060              | -.047             |
|                                    | HRP51 | -.028             | -.020             | .027              | .025              | .015              | -.002             | .006              | .060              | -.009             | .005              | -.009             | -.158             | .390              | -.153             | -.032             | .023              | .024              | .037              | -.014             | -.072             | -.027             | .006              |
|                                    | HRP52 | .034              | .037              | .048              | .000              | .050              | -.063             | .032              | -.033             | .003              | .012              | -.025             | -.077             | -.153             | .336              | -.026             | -.090             | -.045             | -.021             | .000              | .114              | -.133             | .039              |
|                                    | HRP53 | -.033             | .047              | -.080             | .065              | .049              | .074              | .012              | -.031             | -.060             | -.057             | -.085             | .065              | -.032             | -.026             | .547              | .005              | -.076             | -.050             | -.081             | .004              | -.081             | .021              |
|                                    | HRP55 | .041              | .012              | -.045             | -.055             | -.099             | .050              | -.103             | -.003             | -.033             | -.071             | .028              | -.010             | .023              | -.090             | .005              | .536              | .001              | .020              | -.025             | -.135             | .064              | -.038             |
|                                    | HRP56 | -.056             | -.049             | -.024             | -.074             | -.028             | .008              | .026              | -.068             | .023              | .000              | -.024             | -.062             | .024              | -.045             | -.076             | .001              | .432              | -.097             | -.004             | -.085             | .010              | .003              |
|                                    | HRP57 | -.054             | .067              | .080              | -.028             | .022              | .028              | -.056             | -.004             | .011              | -.122             | -.002             | -.045             | .037              | -.021             | -.050             | .020              | -.097             | .479              | -.012             | -.009             | -.011             | -.067             |
|                                    | HRP58 | .024              | .036              | -.024             | -.058             | -.065             | -.050             | .014              | -.012             | .051              | -.035             | -.004             | -.026             | -.014             | .000              | -.081             | -.025             | -.004             | -.012             | .463              | -.084             | -.041             | -.058             |
|                                    | HRP59 | -.076             | -.017             | .048              | .028              | .066              | -.111             | -.047             | -.002             | .038              | .046              | -.031             | -.017             | -.072             | .114              | .004              | -.135             | -.085             | -.009             | -.084             | .475              | -.050             | -.068             |
|                                    | HRP60 | .008              | .077              | -.040             | -.025             | -.047             | .053              | -.052             | .018              | .019              | -.038             | .057              | .060              | -.027             | -.133             | -.081             | .064              | .010              | -.011             | -.041             | -.050             | .395              | -.160             |
|                                    | HRP61 | -.002             | -.086             | -.038             | .026              | .056              | -.066             | .019              | -.062             | -.077             | .013              | .029              | -.047             | .006              | .039              | .021              | -.038             | .003              | -.067             | -.058             | -.068             | -.160             | .425              |
| Anti-image Correlation             | HRP36 | .849 <sup>a</sup> | .014              | -.073             | -.265             | -.145             | -.054             | -.066             | .095              | -.067             | .263              | -.212             | .050              | -.057             | .075              | -.057             | .072              | -.111             | -.100             | .045              | -.142             | .017              | -.005             |
|                                    | HRP37 | .014              | .762 <sup>a</sup> | .002              | -.014             | .097              | .133              | -.036             | .077              | .081              | -.197             | -.022             | .013              | -.035             | .069              | .069              | .019              | -.081             | .106              | .058              | -.028             | .134              | -.144             |
|                                    | HRP38 | -.073             | .002              | .856 <sup>a</sup> | -.189             | .077              | -.133             | .104              | -.068             | .158              | -.014             | -.036             | -.279             | .053              | .102              | -.134             | -.075             | -.045             | .142              | -.043             | .086              | -.078             | -.073             |
|                                    | HRP39 | -.265             | -.014             | -.189             | .907 <sup>a</sup> | -.008             | -.006             | -.029             | -.265             | -.172             | -.021             | .012              | .095              | .058              | -.001             | .127              | -.107             | -.161             | -.059             | -.122             | .059              | -.057             | .058              |
|                                    | HRP40 | -.145             | .097              | .077              | -.008             | .905 <sup>a</sup> | -.155             | -.093             | -.109             | .024              | -.129             | -.140             | -.087             | .032              | .113              | .086              | -.176             | -.055             | .042              | -.124             | .124              | -.098             | .113              |
|                                    | HRP41 | -.054             | .133              | -.133             | -.006             | -.155             | .909 <sup>a</sup> | .025              | -.015             | -.078             | -.252             | -.062             | .029              | -.004             | -.149             | .138              | .094              | .017              | .056              | -.101             | -.221             | .115              | -.138             |
|                                    | HRP42 | -.066             | -.036             | .104              | -.029             | -.093             | .025              | .924 <sup>a</sup> | -.180             | -.086             | .088              | -.187             | -.096             | .013              | .071              | .020              | -.181             | .051              | -.103             | .027              | -.088             | -.107             | .037              |
|                                    | HRP43 | .095              | .077              | -.068             | -.265             | -.109             | -.015             | -.180             | .933 <sup>a</sup> | .034              | .056              | -.112             | -.071             | .136              | -.081             | -.059             | -.006             | -.146             | -.009             | -.026             | -.004             | .041              | -.135             |
|                                    | HRP44 | -.067             | .081              | .158              | -.172             | .024              | -.078             | -.086             | .034              | .884 <sup>a</sup> | -.390             | .019              | -.134             | -.019             | .008              | -.112             | -.062             | .049              | .021              | .103              | .076              | .041              | -.162             |
|                                    | HRP46 | .263              | -.197             | -.014             | -.021             | -.129             | -.252             | .088              | .056              | -.390             | .827 <sup>a</sup> | -.239             | .122              | .014              | .035              | -.126             | -.157             | -.001             | -.286             | -.085             | .109              | -.098             | .033              |
|                                    | HRP47 | -.212             | -.022             | -.036             | .012              | -.140             | -.062             | -.187             | -.112             | .019              | -.239             | .921 <sup>a</sup> | .044              | -.020             | -.060             | -.159             | .053              | -.050             | -.004             | -.008             | -.063             | .125              | .061              |
|                                    | HRP50 | .050              | .013              | -.279             | .095              | -.087             | .029              | -.096             | -.071             | -.134             | .122              | .044              | .866 <sup>a</sup> | -.412             | -.215             | .143              | -.023             | -.153             | -.106             | -.063             | -.041             | .154              | -.117             |
|                                    | HRP51 | -.057             | -.035             | .053              | .058              | .032              | -.004             | .013              | .136              | -.019             | .014              | -.020             | -.412             | .833 <sup>a</sup> | -.423             | -.069             | .051              | .058              | .085              | -.033             | -.168             | -.069             | .014              |
|                                    | HRP52 | .075              | .069              | .102              | -.001             | .113              | -.149             | .071              | -.081             | .008              | .035              | -.060             | -.215             | -.423             | .830 <sup>a</sup> | -.060             | -.213             | -.118             | -.051             | .001              | .285              | -.364             | .104              |
|                                    | HRP53 | -.057             | .069              | -.134             | .127              | .086              | .138              | .020              | -.059             | -.112             | -.126             | -.159             | .143              | -.069             | -.060             | .913 <sup>a</sup> | .009              | -.157             | -.098             | -.161             | .008              | -.174             | .044              |
|                                    | HRP55 | .072              | .019              | -.075             | -.107             | -.176             | .094              | -.181             | -.006             | -.062             | -.157             | .053              | -.023             | .051              | -.213             | .009              | .914 <sup>a</sup> | .003              | .040              | -.051             | -.268             | .140              | -.079             |
|                                    | HRP56 | -.111             | -.081             | -.045             | -.161             | -.055             | .017              | .051              | -.146             | .049              | -.001             | -.050             | -.153             | .058              | -.118             | -.157             | .003              | .945 <sup>a</sup> | -.213             | -.008             | -.187             | .025              | .007              |
|                                    | HRP57 | -.100             | .106              | .142              | -.059             | .042              | .056              | -.103             | -.009             | .021              | -.286             | -.004             | -.106             | .085              | -.051             | -.098             | .040              | -.213             | .933 <sup>a</sup> | -.026             | -.018             | -.026             | -.148             |
|                                    | HRP58 | .045              | .058              | -.043             | -.122             | -.124             | -.101             | .027              | -.026             | .103              | -.085             | -.008             | -.063             | -.033             | .001              | -.161             | -.051             | -.008             | -.026             | .960 <sup>a</sup> | -.179             | -.096             | -.131             |
|                                    | HRP59 | -.142             | -.028             | .086              | .059              | .124              | -.221             | -.088             | -.004             | .076              | .109              | -.063             | -.041             | -.168             | .285              | .008              | -.268             | -.187             | -.018             | -.179             | .869 <sup>a</sup> | -.115             | -.152             |
|                                    | HRP60 | .017              | .134              | -.078             | -.057             | -.098             | .115              | -.107             | .041              | .041              | -.098             | .125              | .154              | -.069             | -.364             | -.174             | .140              | .025              | -.026             | -.096             | -.115             | .871 <sup>a</sup> | -.392             |
|                                    | HRP61 | -.005             | -.144             | -.073             | .058              | .113              | -.138             | .037              | -.135             | -.162             | .033              | .061              | -.117             | .014              | .104              | .044              | -.079             | .007              | -.148             | -.131             | -.152             | -.392             | .904 <sup>a</sup> |

a. Measures of Sampling Adequacy(MSA)

**Total Variance Explained for HRP Step 3**

| Component | Initial Eigenvalues |               |              | Loadings |               |              | Loadings |               |              |
|-----------|---------------------|---------------|--------------|----------|---------------|--------------|----------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total    | % of Variance | Cumulative % | Total    | % of Variance | Cumulative % |
| 1         | 8.288               | 37.673        | 37.673       | 8.288    | 37.673        | 37.673       | 4.063    | 18.466        | 18.466       |
| 2         | 1.855               | 8.433         | 46.106       | 1.855    | 8.433         | 46.106       | 3.817    | 17.348        | 35.814       |
| 3         | 1.346               | 6.116         | 52.223       | 1.346    | 6.116         | 52.223       | 3.610    | 16.409        | 52.223       |
| 4         | 1.050               | 4.771         | 56.993       |          |               |              |          |               |              |
| 5         | .975                | 4.432         | 61.425       |          |               |              |          |               |              |
| 6         | .901                | 4.096         | 65.521       |          |               |              |          |               |              |
| 7         | .880                | 4.001         | 69.522       |          |               |              |          |               |              |
| 8         | .792                | 3.601         | 73.123       |          |               |              |          |               |              |
| 9         | .710                | 3.227         | 76.350       |          |               |              |          |               |              |
| 10        | .610                | 2.772         | 79.122       |          |               |              |          |               |              |
| 11        | .597                | 2.711         | 81.833       |          |               |              |          |               |              |
| 12        | .579                | 2.631         | 84.464       |          |               |              |          |               |              |
| 13        | .507                | 2.306         | 86.771       |          |               |              |          |               |              |
| 14        | .457                | 2.079         | 88.850       |          |               |              |          |               |              |
| 15        | .427                | 1.941         | 90.791       |          |               |              |          |               |              |
| 16        | .401                | 1.823         | 92.613       |          |               |              |          |               |              |
| 17        | .362                | 1.645         | 94.258       |          |               |              |          |               |              |
| 18        | .322                | 1.465         | 95.723       |          |               |              |          |               |              |
| 19        | .280                | 1.272         | 96.995       |          |               |              |          |               |              |
| 20        | .247                | 1.124         | 98.118       |          |               |              |          |               |              |
| 21        | .227                | 1.031         | 99.149       |          |               |              |          |               |              |
| 22        | .187                | .851          | 100.000      |          |               |              |          |               |              |

Extraction Method: Principal Component Analysis.

STEP 4 - IDENTIFYING ITEMS IN FACTORS

| KMO and Bartlett's Test                          |                    |          |
|--------------------------------------------------|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .895     |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 2648.691 |
|                                                  | df                 | 231      |
|                                                  | Sig.               | 0.000    |

| Anti-image Matrices HRP Step 4 |       |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|--------------------------------|-------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                                |       | HRP36             | HRP37             | HRP38             | HRP39             | HRP40             | HRP41             | HRP42             | HRP43             | HRP44             | HRP46             | HRP47             | HRP50             | HRP51             | HRP52             | HRP53             | HRP55             | HRP56             | HRP57             | HRP58             | HRP59             | HRP60             | HRP61             |
| Anti-image Covariance          | HRP36 | .597              | .010              | -.046             | -.142             | -.086             | -.030             | -.040             | .052              | -.038             | .125              | -.118             | .024              | -.028             | .034              | -.033             | .041              | -.056             | -.054             | .024              | -.076             | .008              | -.002             |
|                                | HRP37 | .010              | .839              | .002              | -.009             | .068              | .089              | -.026             | .050              | .054              | -.111             | -.015             | .007              | -.020             | .037              | .047              | .012              | -.049             | .067              | .036              | -.017             | .077              | -.086             |
|                                | HRP38 | -.046             | .002              | .660              | -.107             | .048              | -.079             | .066              | -.039             | .094              | -.007             | -.021             | -.139             | .027              | .048              | -.080             | -.045             | -.024             | .080              | -.024             | .048              | -.040             | -.038             |
|                                | HRP39 | -.142             | -.009             | -.107             | .482              | -.004             | -.003             | -.016             | -.130             | -.087             | -.009             | .006              | .040              | .025              | .000              | .065              | -.055             | -.074             | -.028             | -.058             | .028              | -.025             | .026              |
|                                | HRP40 | -.086             | .068              | .048              | -.004             | .592              | -.087             | -.056             | -.059             | .013              | -.061             | -.078             | -.041             | .015              | .050              | .049              | -.099             | -.028             | .022              | -.065             | .066              | -.047             | .056              |
|                                | HRP41 | -.030             | .089              | -.079             | -.003             | -.087             | .533              | .014              | -.008             | -.041             | -.113             | -.033             | .013              | -.002             | -.063             | .074              | .050              | .008              | .028              | -.050             | -.111             | .053              | -.066             |
|                                | HRP42 | -.040             | -.026             | .066              | -.016             | -.056             | .014              | .606              | -.099             | -.049             | .042              | -.105             | -.046             | .006              | .032              | .012              | -.103             | .026              | -.056             | .014              | -.047             | -.052             | .019              |
|                                | HRP43 | .052              | .050              | -.039             | -.130             | -.059             | -.008             | -.099             | .499              | .017              | .024              | -.057             | -.031             | .060              | -.033             | -.031             | -.003             | -.068             | -.004             | -.012             | -.002             | .018              | -.062             |
|                                | HRP44 | -.038             | .054              | .094              | -.087             | .013              | -.041             | -.049             | .017              | .528              | -.174             | .010              | -.060             | -.009             | .003              | -.060             | -.033             | .023              | .011              | .051              | .038              | .019              | -.077             |
|                                | HRP46 | .125              | -.111             | -.007             | -.009             | -.061             | -.113             | .042              | .024              | -.174             | .377              | -.106             | .046              | .005              | .012              | -.057             | -.071             | .000              | -.122             | -.035             | .046              | -.038             | .013              |
|                                | HRP47 | -.118             | -.015             | -.021             | .006              | -.078             | -.033             | -.105             | -.057             | .010              | -.106             | .524              | .020              | -.009             | -.025             | -.085             | .028              | -.024             | -.002             | -.004             | -.031             | .057              | .029              |
|                                | HRP50 | .024              | .007              | -.139             | .040              | -.041             | .013              | -.046             | -.031             | -.060             | .046              | .020              | .377              | -.158             | -.077             | .065              | -.010             | -.062             | -.045             | -.026             | -.017             | .060              | -.047             |
|                                | HRP51 | -.028             | -.020             | .027              | .025              | .015              | -.002             | .006              | .060              | -.009             | .005              | -.009             | -.158             | .390              | -.153             | -.032             | .023              | .024              | .037              | -.014             | -.072             | -.027             | .006              |
|                                | HRP52 | .034              | .037              | .048              | .000              | .050              | -.063             | .032              | -.033             | .003              | .012              | -.025             | -.077             | -.153             | .336              | -.026             | -.090             | -.045             | -.021             | .000              | .114              | -.133             | .039              |
|                                | HRP53 | -.033             | .047              | -.080             | .065              | .049              | .074              | .012              | -.031             | -.060             | -.057             | -.085             | .065              | -.032             | -.026             | .547              | .005              | -.076             | -.050             | -.081             | .004              | -.081             | .021              |
|                                | HRP55 | .041              | .012              | -.045             | -.055             | -.099             | .050              | -.103             | -.003             | -.033             | -.071             | .028              | -.010             | .023              | -.090             | .005              | .536              | .001              | .020              | -.025             | -.135             | .064              | -.038             |
|                                | HRP56 | -.056             | -.049             | -.024             | -.074             | -.028             | .008              | .026              | -.068             | .023              | .000              | -.024             | -.062             | .024              | -.045             | -.076             | .001              | .432              | -.097             | -.004             | -.085             | .010              | .003              |
|                                | HRP57 | -.054             | .067              | .080              | -.028             | .022              | .028              | -.056             | -.004             | .011              | -.122             | -.002             | -.045             | .037              | -.021             | -.050             | .020              | -.097             | .479              | -.012             | -.009             | -.011             | -.067             |
|                                | HRP58 | .024              | .036              | -.024             | -.058             | -.065             | -.050             | .014              | -.012             | .051              | -.035             | -.004             | -.026             | -.014             | .000              | -.081             | -.025             | -.004             | -.012             | .463              | -.084             | -.041             | -.058             |
|                                | HRP59 | -.076             | -.017             | .048              | .028              | .066              | -.111             | -.047             | -.002             | .038              | .046              | -.031             | -.017             | -.072             | .114              | .004              | -.135             | -.085             | -.009             | -.084             | .475              | -.050             | -.068             |
|                                | HRP60 | .008              | .077              | -.040             | -.025             | -.047             | .053              | -.052             | .018              | .019              | -.038             | .057              | .060              | -.027             | -.133             | -.081             | .064              | .010              | -.011             | -.041             | -.050             | .395              | -.160             |
|                                | HRP61 | -.002             | -.086             | -.038             | .026              | .056              | -.066             | .019              | -.062             | -.077             | .013              | .029              | -.047             | .006              | .039              | .021              | -.038             | .003              | -.067             | -.058             | -.068             | -.160             | .425              |
| Anti-image Correlation         | HRP36 | .849 <sup>a</sup> | .014              | -.073             | -.265             | -.145             | -.054             | -.066             | .095              | -.067             | .263              | -.212             | .050              | -.057             | .075              | -.057             | .072              | -.111             | -.100             | .045              | -.142             | .017              | -.005             |
|                                | HRP37 | .014              | .762 <sup>a</sup> | .002              | -.014             | .097              | .133              | -.036             | .077              | .081              | -.197             | -.022             | .013              | -.035             | .069              | .069              | .019              | -.081             | .106              | .058              | -.028             | .134              | -.144             |
|                                | HRP38 | -.073             | .002              | .856 <sup>a</sup> | -.189             | .077              | -.133             | .104              | -.068             | .158              | -.014             | -.036             | -.279             | .053              | .102              | -.134             | -.075             | -.045             | .142              | -.043             | .086              | -.078             | -.073             |
|                                | HRP39 | -.265             | -.014             | -.189             | .907 <sup>a</sup> | -.008             | -.006             | -.029             | -.265             | -.172             | -.021             | .012              | .095              | .058              | -.001             | .127              | -.107             | -.161             | -.059             | -.122             | .059              | -.057             | .058              |
|                                | HRP40 | -.145             | .097              | .077              | -.008             | .905 <sup>a</sup> | -.155             | -.093             | -.109             | .024              | -.129             | -.140             | -.087             | .032              | .113              | .086              | -.176             | -.055             | .042              | -.124             | .124              | -.098             | .113              |
|                                | HRP41 | -.054             | .133              | -.133             | -.006             | -.155             | .909 <sup>a</sup> | .025              | -.015             | -.078             | -.252             | -.062             | .029              | -.004             | -.149             | .138              | .094              | .017              | .056              | -.101             | -.221             | .115              | -.138             |
|                                | HRP42 | -.066             | -.036             | .104              | -.029             | -.093             | .025              | .924 <sup>a</sup> | -.180             | -.086             | .088              | -.187             | -.096             | .013              | .071              | .020              | -.181             | .051              | -.103             | .027              | -.088             | -.107             | .037              |
|                                | HRP43 | .095              | .077              | -.068             | -.265             | -.109             | -.015             | -.180             | .933 <sup>a</sup> | .034              | .056              | -.112             | -.071             | .136              | -.081             | -.059             | -.006             | -.146             | -.009             | -.026             | -.004             | .041              | -.135             |
|                                | HRP44 | -.067             | .081              | .158              | -.172             | .024              | -.078             | -.086             | .034              | .884 <sup>a</sup> | -.390             | .019              | -.134             | -.019             | .008              | -.112             | -.062             | .049              | .021              | .103              | .076              | .041              | -.162             |
|                                | HRP46 | .263              | -.197             | -.014             | -.021             | -.129             | -.252             | .088              | .056              | -.390             | .827 <sup>a</sup> | -.239             | .122              | .014              | .035              | -.126             | -.157             | -.001             | -.286             | -.085             | .109              | -.098             | .033              |
|                                | HRP47 | -.212             | -.022             | -.036             | .012              | -.140             | -.062             | -.187             | -.112             | .019              | -.239             | .921 <sup>a</sup> | .044              | -.020             | -.060             | -.159             | .053              | -.050             | -.004             | -.008             | -.063             | .125              | .061              |
|                                | HRP50 | .050              | .013              | -.279             | .095              | -.087             | .029              | -.096             | -.071             | -.134             | .122              | .044              | .866 <sup>a</sup> | -.412             | -.215             | .143              | -.023             | -.153             | -.106             | -.063             | -.041             | .154              | -.117             |
|                                | HRP51 | -.057             | -.035             | .053              | .058              | .032              | -.004             | .013              | .136              | -.019             | .014              | -.020             | -.412             | .833 <sup>a</sup> | -.423             | -.069             | .051              | .058              | .085              | -.033             | -.168             | -.069             | .014              |
|                                | HRP52 | .075              | .069              | .102              | -.001             | .113              | -.149             | .071              | -.081             | .008              | .035              | -.060             | -.215             | -.423             | .830 <sup>a</sup> | -.060             | -.213             | -.118             | -.051             | .001              | .285              | -.364             | .104              |
|                                | HRP53 | -.057             | .069              | -.134             | .127              | .086              | .138              | .020              | -.059             | -.112             | -.126             | -.159             | .143              | -.069             | -.060             | .913 <sup>a</sup> | .009              | -.157             | -.098             | -.161             | .008              | -.174             | .044              |
|                                | HRP55 | .072              | .019              | -.075             | -.107             | -.176             | .094              | -.181             | -.006             | -.062             | -.157             | .053              | -.023             | .051              | -.213             | .009              | .914 <sup>a</sup> | .003              | .040              | -.051             | -.268             | .140              | -.079             |
|                                | HRP56 | -.111             | -.081             | -.045             | -.161             | -.055             | .017              | .051              | -.146             | .049              | -.001             | -.050             | -.153             | .058              | -.118             | -.157             | .003              | .945 <sup>a</sup> | -.213             | -.008             | -.187             | .025              | .007              |
|                                | HRP57 | -.100             | .106              | .142              | -.059             | .042              | .056              | -.103             | -.009             | .021              | -.286             | -.004             | -.106             | .085              | -.051             | -.098             | .040              | -.213             | .933 <sup>a</sup> | -.026             | -.018             | -.026             | -.148             |
|                                | HRP58 | .045              | .058              | -.043             | -.122             | -.124             | -.101             | .027              | -.026             | .103              | -.085             | -.008             | -.063             | -.033             | .001              | -.161             | -.051             | -.008             | -.026             | .960 <sup>a</sup> | -.179             | -.096             | -.131             |
|                                | HRP59 | -.142             | -.028             | .086              | .059              | .124              | -.221             | -.088             | -.004             | .076              | .109              | -.063             | -.041             | -.168             | .285              | .008              | -.268             | -.187             | -.018             | -.179             | .869 <sup>a</sup> | -.115             | -.152             |
|                                | HRP60 | .017              | .134              | -.078             | -.057             | -.098             | .115              | -.107             | .041              | .041              | -.098             | .125              | .154              | -.069             | -.364             | -.174             | .140              | .025              | -.026             | -.096             | -.115             | .871 <sup>a</sup> | -.392             |
|                                | HRP61 | -.005             | -.144             | -.073             | .058              | .113              | -.138             | .037              | -.135             | -.162             | .033              | .061              | -.117             | .014              | .104              | .044              | -.079             | .007              | -.148             | -.131             | -.152             | -.392             | .904 <sup>a</sup> |

a. Measures of Sampling Adequacy(MSA)

**Total Variance Explained for HRP Step 4**

| Component | Initial Eigenvalues |               |              | Loadings |               |              | Loadings |               |              |
|-----------|---------------------|---------------|--------------|----------|---------------|--------------|----------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total    | % of Variance | Cumulative % | Total    | % of Variance | Cumulative % |
| 1         | 8.288               | 37.673        | 37.673       | 8.288    | 37.673        | 37.673       | 4.063    | 18.466        | 18.466       |
| 2         | 1.855               | 8.433         | 46.106       | 1.855    | 8.433         | 46.106       | 3.817    | 17.348        | 35.814       |
| 3         | 1.346               | 6.116         | 52.223       | 1.346    | 6.116         | 52.223       | 3.610    | 16.409        | 52.223       |
| 4         | 1.050               | 4.771         | 56.993       |          |               |              |          |               |              |
| 5         | .975                | 4.432         | 61.425       |          |               |              |          |               |              |
| 6         | .901                | 4.096         | 65.521       |          |               |              |          |               |              |
| 7         | .880                | 4.001         | 69.522       |          |               |              |          |               |              |
| 8         | .792                | 3.601         | 73.123       |          |               |              |          |               |              |
| 9         | .710                | 3.227         | 76.350       |          |               |              |          |               |              |
| 10        | .610                | 2.772         | 79.122       |          |               |              |          |               |              |
| 11        | .597                | 2.711         | 81.833       |          |               |              |          |               |              |
| 12        | .579                | 2.631         | 84.464       |          |               |              |          |               |              |
| 13        | .507                | 2.306         | 86.771       |          |               |              |          |               |              |
| 14        | .457                | 2.079         | 88.850       |          |               |              |          |               |              |
| 15        | .427                | 1.941         | 90.791       |          |               |              |          |               |              |
| 16        | .401                | 1.823         | 92.613       |          |               |              |          |               |              |
| 17        | .362                | 1.645         | 94.258       |          |               |              |          |               |              |
| 18        | .322                | 1.465         | 95.723       |          |               |              |          |               |              |
| 19        | .280                | 1.272         | 96.995       |          |               |              |          |               |              |
| 20        | .247                | 1.124         | 98.118       |          |               |              |          |               |              |
| 21        | .227                | 1.031         | 99.149       |          |               |              |          |               |              |
| 22        | .187                | .851          | 100.000      |          |               |              |          |               |              |

Extraction Method: Principal Component Analysis.

| Human Resource Practices - Rotated Component Matrix <sup>a</sup> |           |      |      |
|------------------------------------------------------------------|-----------|------|------|
|                                                                  | Component |      |      |
|                                                                  | 1         | 2    | 3    |
| HRP36                                                            | .738      |      |      |
| HRP39                                                            | .684      |      |      |
| HRP43                                                            | .631      |      |      |
| HRP56                                                            | .587      |      |      |
| HRP59                                                            | .562      |      |      |
| HRP42                                                            | .544      |      |      |
| HRP47                                                            | .521      |      |      |
| HRP40                                                            | .514      |      |      |
| HRP38                                                            |           |      |      |
| HRP55                                                            |           |      |      |
| HRP51                                                            |           | .838 |      |
| HRP52                                                            |           | .803 |      |
| HRP50                                                            |           | .763 |      |
| HRP60                                                            |           | .646 |      |
| HRP61                                                            |           | .521 |      |
| HRP58                                                            |           |      |      |
| HRP37                                                            |           |      |      |
| HRP46                                                            |           |      | .884 |
| HRP44                                                            |           |      | .739 |
| HRP57                                                            |           |      | .572 |
| HRP53                                                            |           |      | .505 |
| HRP41                                                            |           |      |      |
| Extraction Method: Principal Component Analysis.                 |           |      |      |
| Rotation Method: Varimax with Kaiser Normalization.              |           |      |      |
| a. Rotation converged in 6 iterations.                           |           |      |      |

### 3.3 FACTOR ANALYSIS FOR HIGH PERFORMANCE WORK SYSTEMS

| KMO and Bartlett's Test                          |                    |          |
|--------------------------------------------------|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .746     |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 1087.285 |
|                                                  | df                 | 78       |
|                                                  | Sig.               | .000     |

| Anti-image Matrices for HPWS          |        |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|---------------------------------------|--------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                                       |        | HPWS23            | HPWS24            | HPWS25            | HPWS26            | HPWS27            | HPWS28            | HPWS29            | HPWS30            | HPWS31            | HPWS32            | HPWS33            | HPWS34            | HPWS35            |
| Anti-image<br>Covariance              | HPWS23 | .645              | -.126             | -.094             | .013              | -.259             | .011              | -.063             | .015              | .066              | -.113             | .034              | .043              | -.008             |
|                                       | HPWS24 | -.126             | .637              | -.135             | -.074             | .068              | -.032             | -.109             | -.034             | -.045             | .013              | -.030             | -.081             | -.008             |
|                                       | HPWS25 | -.094             | -.135             | .621              | -.045             | .093              | -.043             | .117              | -.022             | -.189             | -.003             | .033              | -.077             | -.068             |
|                                       | HPWS26 | .013              | -.074             | -.045             | .823              | -.138             | -.034             | .053              | .018              | .061              | -.018             | -.159             | .051              | -.084             |
|                                       | HPWS27 | -.259             | .068              | .093              | -.138             | .544              | .027              | -.017             | -.065             | -.114             | .117              | -.052             | -.135             | -.009             |
|                                       | HPWS28 | .011              | -.032             | -.043             | -.034             | .027              | .658              | -.087             | -.242             | -.030             | .127              | .021              | .017              | .036              |
|                                       | HPWS29 | -.063             | -.109             | .117              | .053              | -.017             | -.087             | .679              | .045              | -.007             | -.012             | -.148             | -.118             | -.063             |
|                                       | HPWS30 | .015              | -.034             | -.022             | .018              | -.065             | -.242             | .045              | .458              | -.042             | .016              | -.079             | -.104             | -.115             |
|                                       | HPWS31 | .066              | -.045             | -.189             | .061              | -.114             | -.030             | -.007             | -.042             | .578              | -.220             | -.022             | .092              | -.051             |
|                                       | HPWS32 | -.113             | .013              | -.003             | -.018             | .117              | .127              | -.012             | .016              | -.220             | .463              | -.222             | -.113             | .063              |
|                                       | HPWS33 | .034              | -.030             | .033              | -.159             | -.052             | .021              | -.148             | -.079             | -.022             | -.222             | .569              | .050              | .079              |
|                                       | HPWS34 | .043              | -.081             | -.077             | .051              | -.135             | .017              | -.118             | -.104             | .092              | -.113             | .050              | .409              | -.167             |
|                                       | HPWS35 | -.008             | -.008             | -.068             | -.084             | -.009             | .036              | -.063             | -.115             | -.051             | .063              | .079              | -.167             | .514              |
| Anti-image<br>Correlation             | HPWS23 | .728 <sup>a</sup> | -.197             | -.148             | .017              | -.437             | .017              | -.095             | .028              | .107              | -.207             | .056              | .084              | -.014             |
|                                       | HPWS24 | -.197             | .871 <sup>a</sup> | -.215             | -.102             | .116              | -.050             | -.165             | -.064             | -.073             | .024              | -.049             | -.159             | -.015             |
|                                       | HPWS25 | -.148             | -.215             | .774 <sup>a</sup> | -.064             | .159              | -.068             | .180              | -.041             | -.315             | -.005             | .056              | -.152             | -.120             |
|                                       | HPWS26 | .017              | -.102             | -.064             | .719 <sup>a</sup> | -.207             | -.046             | .071              | .030              | .088              | -.029             | -.232             | .088              | -.129             |
|                                       | HPWS27 | -.437             | .116              | .159              | -.207             | .694 <sup>a</sup> | .045              | -.029             | -.129             | -.203             | .232              | -.093             | -.287             | -.017             |
|                                       | HPWS28 | .017              | -.050             | -.068             | -.046             | .045              | .671 <sup>a</sup> | -.130             | -.441             | -.048             | .230              | .034              | .032              | .062              |
|                                       | HPWS29 | -.095             | -.165             | .180              | .071              | -.029             | -.130             | .797 <sup>a</sup> | .080              | -.012             | -.021             | -.238             | -.224             | -.106             |
|                                       | HPWS30 | .028              | -.064             | -.041             | .030              | -.129             | -.441             | .080              | .805 <sup>a</sup> | -.081             | .034              | -.155             | -.240             | -.236             |
|                                       | HPWS31 | .107              | -.073             | -.315             | .088              | -.203             | -.048             | -.012             | -.081             | .697 <sup>a</sup> | -.425             | -.039             | .190              | -.093             |
|                                       | HPWS32 | -.207             | .024              | -.005             | -.029             | .232              | .230              | -.021             | .034              | -.425             | .598 <sup>a</sup> | -.432             | -.259             | .130              |
|                                       | HPWS33 | .056              | -.049             | .056              | -.232             | -.093             | .034              | -.238             | -.155             | -.039             | -.432             | .673 <sup>a</sup> | .103              | .146              |
|                                       | HPWS34 | .084              | -.159             | -.152             | .088              | -.287             | .032              | -.224             | -.240             | .190              | -.259             | .103              | .773 <sup>a</sup> | -.364             |
|                                       | HPWS35 | -.014             | -.015             | -.120             | -.129             | -.017             | .062              | -.106             | -.236             | -.093             | .130              | .146              | -.364             | .825 <sup>a</sup> |
| a. Measures of Sampling Adequacy(MSA) |        |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |

| Total Variance Explained for HPWS |                     |               |              |          |               |              |
|-----------------------------------|---------------------|---------------|--------------|----------|---------------|--------------|
| Component                         | Initial Eigenvalues |               |              | Loadings |               |              |
|                                   | Total               | % of Variance | Cumulative % | Total    | % of Variance | Cumulative % |
| 1                                 | 4.147               | 31.897        | 31.897       | 4.147    | 31.897        | 31.897       |
| 2                                 | 1.849               | 14.225        | 46.122       |          |               |              |
| 3                                 | 1.192               | 9.166         | 55.288       |          |               |              |
| 4                                 | .983                | 7.560         | 62.847       |          |               |              |
| 5                                 | .960                | 7.387         | 70.234       |          |               |              |
| 6                                 | .775                | 5.962         | 76.196       |          |               |              |
| 7                                 | .763                | 5.867         | 82.064       |          |               |              |
| 8                                 | .529                | 4.066         | 86.129       |          |               |              |
| 9                                 | .470                | 3.615         | 89.744       |          |               |              |
| 10                                | .418                | 3.218         | 92.962       |          |               |              |
| 11                                | .382                | 2.938         | 95.900       |          |               |              |
| 12                                | .308                | 2.365         | 98.265       |          |               |              |
| 13                                | .226                | 1.735         | 100.000      |          |               |              |

Extraction Method: Principal Component Analysis.

### Factor Analysis (after Facor Loading Procedure)- High Performance Work Systems

| KMO and Bartlett's Test                          |                    |         |
|--------------------------------------------------|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .750    |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 933.797 |
|                                                  | df                 | 55      |
|                                                  | Sig.               | .000    |

**Anti-image Matrices for HPWS after Factor Loading Procedure**

|                           |        | HPWS23            | HPWS24            | HPWS25            | HPWS27            | HPWS29            | HPWS30            | HPWS31            | HPWS32            | HPWS33            | HPWS34            | HPWS35            |
|---------------------------|--------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Anti-image<br>Covariance  | HPWS23 | .645              | -.126             | -.093             | -.269             | -.064             | .024              | .066              | -.122             | .038              | .042              | -.008             |
|                           | HPWS24 | -.126             | .645              | -.145             | .060              | -.112             | -.057             | -.042             | .020              | -.046             | -.077             | -.015             |
|                           | HPWS25 | -.093             | -.145             | .627              | .091              | .118              | -.047             | -.191             | .005              | .027              | -.074             | -.072             |
|                           | HPWS27 | -.269             | .060              | .091              | .570              | -.006             | -.070             | -.109             | .121              | -.087             | -.134             | -.026             |
|                           | HPWS29 | -.064             | -.112             | .118              | -.006             | .694              | .016              | -.015             | .006              | -.147             | -.123             | -.055             |
|                           | HPWS30 | .024              | -.057             | -.047             | -.070             | .016              | .569              | -.066             | .082              | -.092             | -.123             | -.128             |
|                           | HPWS31 | .066              | -.042             | -.191             | -.109             | -.015             | -.066             | .584              | -.228             | -.011             | .091              | -.045             |
|                           | HPWS32 | -.122             | .020              | .005              | .121              | .006              | .082              | -.228             | .489              | -.254             | -.123             | .060              |
|                           | HPWS33 | .038              | -.046             | .027              | -.087             | -.147             | -.092             | -.011             | -.254             | .602              | .063              | .067              |
|                           | HPWS34 | .042              | -.077             | -.074             | -.134             | -.123             | -.123             | .091              | -.123             | .063              | .413              | -.167             |
|                           | HPWS35 | -.008             | -.015             | -.072             | -.026             | -.055             | -.128             | -.045             | .060              | .067              | -.167             | .525              |
| Anti-image<br>Correlation | HPWS23 | .714 <sup>a</sup> | -.195             | -.146             | -.444             | -.096             | .039              | .107              | -.217             | .062              | .082              | -.013             |
|                           | HPWS24 | -.195             | .866 <sup>a</sup> | -.228             | .100              | -.168             | -.095             | -.068             | .035              | -.074             | -.149             | -.025             |
|                           | HPWS25 | -.146             | -.228             | .765 <sup>a</sup> | .153              | .178              | -.079             | -.315             | .010              | .044              | -.146             | -.126             |
|                           | HPWS27 | -.444             | .100              | .153              | .693 <sup>a</sup> | -.010             | -.123             | -.189             | .229              | -.149             | -.277             | -.047             |
|                           | HPWS29 | -.096             | -.168             | .178              | -.010             | .816 <sup>a</sup> | .025              | -.024             | .010              | -.227             | -.229             | -.092             |
|                           | HPWS30 | .039              | -.095             | -.079             | -.123             | .025              | .852 <sup>a</sup> | -.115             | .156              | -.158             | -.254             | -.234             |
|                           | HPWS31 | .107              | -.068             | -.315             | -.189             | -.024             | -.115             | .700 <sup>a</sup> | -.426             | -.018             | .185              | -.081             |
|                           | HPWS32 | -.217             | .035              | .010              | .229              | .010              | .156              | -.426             | .578 <sup>a</sup> | -.469             | -.274             | .118              |
|                           | HPWS33 | .062              | -.074             | .044              | -.149             | -.227             | -.158             | -.018             | -.469             | .655 <sup>a</sup> | .127              | .120              |
|                           | HPWS34 | .082              | -.149             | -.146             | -.277             | -.229             | -.254             | .185              | -.274             | .127              | .766 <sup>a</sup> | -.360             |
|                           | HPWS35 | -.013             | -.025             | -.126             | -.047             | -.092             | -.234             | -.081             | .118              | .120              | -.360             | .833 <sup>a</sup> |

a. Measures of Sampling Adequacy(MSA)

### Total Variance Explained for HPWS After Factor Loading Procedure

| Component | Initial Eigenvalues |               |              | Loadings |               |              |
|-----------|---------------------|---------------|--------------|----------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total    | % of Variance | Cumulative % |
| 1         | 3.931               | 35.735        | 35.735       | 3.931    | 35.735        | 35.735       |
| 2         | 1.664               | 15.131        | 50.866       |          |               |              |
| 3         | 1.152               | 10.471        | 61.337       |          |               |              |
| 4         | .904                | 8.217         | 69.554       |          |               |              |
| 5         | .776                | 7.053         | 76.607       |          |               |              |
| 6         | .577                | 5.247         | 81.854       |          |               |              |
| 7         | .525                | 4.776         | 86.631       |          |               |              |
| 8         | .446                | 4.057         | 90.687       |          |               |              |
| 9         | .411                | 3.735         | 94.423       |          |               |              |
| 10        | .385                | 3.497         | 97.919       |          |               |              |
| 11        | .229                | 2.081         | 100.000      |          |               |              |

Extraction Method: Principal Component Analysis.

## 4 MISSING VALUE ANALYSIS

| Univariate Statistics |     |        |                |         |         |                              |      |  |
|-----------------------|-----|--------|----------------|---------|---------|------------------------------|------|--|
|                       | N   | Mean   | Std. Deviation | Missing |         | No. of Extremes <sup>a</sup> |      |  |
|                       |     |        |                | Count   | Percent | Low                          | High |  |
| OC1                   | 261 | 5.1226 | .65067         | 0       | 0.0     | 5                            | 0    |  |
| OC2                   | 261 | 5.5632 | .52699         | 0       | 0.0     | 0                            | 0    |  |
| OC3                   | 261 | 4.8391 | .42626         | 0       | 0.0     |                              |      |  |
| OC4                   | 261 | 4.8889 | .48745         | 0       | 0.0     |                              |      |  |
| OC5                   | 261 | 5.5900 | .53036         | 0       | 0.0     | 0                            | 0    |  |
| OC6                   | 261 | 4.7471 | .47762         | 0       | 0.0     | 0                            | 0    |  |
| OC7                   | 261 | 5.2874 | .70013         | 0       | 0.0     | 7                            | 0    |  |
| OC8                   | 261 | 5.5977 | .55038         | 0       | 0.0     | 0                            | 0    |  |
| OC9                   | 261 | 3.0230 | .74385         | 0       | 0.0     |                              |      |  |
| OC10                  | 261 | 5.6207 | .56653         | 0       | 0.0     | 0                            | 0    |  |
| OC11                  | 261 | 6.0192 | .47598         | 0       | 0.0     |                              |      |  |
| OC12                  | 261 | 5.0920 | .70654         | 0       | 0.0     |                              |      |  |
| OC13                  | 261 | 2.5939 | .67068         | 0       | 0.0     | 0                            | 4    |  |
| OC14                  | 261 | 6.0268 | .50692         | 0       | 0.0     |                              |      |  |
| OC15                  | 261 | 3.1609 | .76269         | 0       | 0.0     |                              |      |  |
| OC16                  | 261 | 5.9502 | .48971         | 0       | 0.0     |                              |      |  |
| OC17                  | 261 | 5.9885 | .47623         | 0       | 0.0     |                              |      |  |
| HPWS18                | 261 | 5.4291 | .54751         | 0       | 0.0     | 0                            | 0    |  |
| HPWS19                | 261 | 4.9042 | .41420         | 0       | 0.0     |                              |      |  |
| HPWS20                | 261 | 5.1111 | .61324         | 0       | 0.0     |                              |      |  |
| HPWS21                | 261 | 5.9770 | .38161         | 0       | 0.0     |                              |      |  |
| HPWS22                | 261 | 5.4330 | .55497         | 0       | 0.0     | 0                            | 0    |  |
| HPWS23                | 261 | 3.7816 | 1.13773        | 0       | 0.0     | 0                            | 0    |  |
| HPWS24                | 261 | 5.5402 | .57789         | 0       | 0.0     | 0                            | 0    |  |
| HPWS25                | 261 | 4.7280 | .67848         | 0       | 0.0     | 5                            | 0    |  |
| HPWS26                | 261 | 5.8046 | .45164         | 0       | 0.0     |                              |      |  |
| HPWS27                | 261 | 5.9387 | .48445         | 0       | 0.0     |                              |      |  |
| HPWS28                | 261 | 5.9655 | .45017         | 0       | 0.0     |                              |      |  |
| HPWS29                | 261 | 4.9770 | .47175         | 0       | 0.0     |                              |      |  |
| HPWS30                | 261 | 4.9502 | .47374         | 0       | 0.0     |                              |      |  |
| HRP31                 | 261 | 5.5096 | .57921         | 0       | 0.0     | 1                            | 0    |  |
| HRP32                 | 261 | 4.9579 | .46631         | 0       | 0.0     |                              |      |  |
| HRP33                 | 261 | 5.5326 | .57168         | 0       | 0.0     | 0                            | 0    |  |
| HRP34                 | 261 | 5.3027 | .59836         | 0       | 0.0     | 0                            | 0    |  |
| HRP35                 | 261 | 5.4444 | .57661         | 0       | 0.0     | 0                            | 0    |  |
| HRP36                 | 261 | 5.7433 | .51066         | 0       | 0.0     |                              |      |  |
| HRP37                 | 261 | 4.3487 | .84869         | 0       | 0.0     | 8                            | 0    |  |
| HRP38                 | 261 | 5.2299 | .63308         | 0       | 0.0     | 4                            | 0    |  |
| HRP39                 | 261 | 4.7816 | .57026         | 0       | 0.0     |                              |      |  |
| HRP40                 | 261 | 5.9195 | .43549         | 0       | 0.0     |                              |      |  |
| HRP41                 | 261 | 4.7778 | .50043         | 0       | 0.0     |                              |      |  |
| HRP42                 | 261 | 4.2912 | .65595         | 0       | 0.0     | 4                            | 0    |  |
| HRP43                 | 261 | 6.0881 | .43400         | 0       | 0.0     |                              |      |  |
| HRP44                 | 261 | 6.1418 | .44616         | 0       | 0.0     |                              |      |  |
| HRP45                 | 261 | 3.9004 | .55957         | 0       | 0.0     |                              |      |  |
| HRP46                 | 261 | 3.6973 | .54451         | 0       | 0.0     | 0                            | 0    |  |
| HRP47                 | 261 | 3.7701 | .54845         | 0       | 0.0     |                              |      |  |
| HRP48                 | 261 | 4.7816 | .58360         | 0       | 0.0     |                              |      |  |
| HRP49                 | 261 | 5.9655 | .39560         | 0       | 0.0     |                              |      |  |
| HRP50                 | 261 | 4.8774 | .48863         | 0       | 0.0     |                              |      |  |
| HRP51                 | 261 | 5.4061 | .64136         | 0       | 0.0     | 2                            | 0    |  |
| HRP52                 | 261 | 5.1073 | .65924         | 0       | 0.0     | 6                            | 0    |  |
| HRP53                 | 261 | 5.5517 | .62804         | 0       | 0.0     | 2                            | 0    |  |
| HRP54                 | 261 | 5.4368 | .64512         | 0       | 0.0     | 3                            | 0    |  |
| HRP55                 | 261 | 4.7701 | .57582         | 0       | 0.0     |                              |      |  |
| HRP56                 | 261 | 5.6360 | .58972         | 0       | 0.0     | 0                            | 0    |  |

a. Number of cases outside the range (Q1 - 1.5\*IQR, Q3 + 1.5\*IQR).

b. . indicates that the inter-quartile range (IQR) is zero.

## 5 CORRELATION ANALYSIS

| Correlations Among the Variables |                     |              |         |         |         |         |         |         |
|----------------------------------|---------------------|--------------|---------|---------|---------|---------|---------|---------|
|                                  |                     | Correlations |         |         |         |         |         |         |
|                                  |                     | OC_1         | OC_2    | OC_3    | hrp_1   | hrp_2   | hrp_3   | hpws    |
| OC_1                             | Pearson Correlation | 1            | -.225** | .501**  | .562**  | .381**  | .580**  | .523**  |
|                                  | Sig. (2-tailed)     |              | .000    | .000    | .000    | .000    | .000    | .000    |
|                                  | N                   | 261          | 261     | 261     | 261     | 261     | 261     | 261     |
| OC_2                             | Pearson Correlation | -.225**      | 1       | -.208** | -.366** | -.308** | -.332** | -.219** |
|                                  | Sig. (2-tailed)     | .000         |         | .001    | .000    | .000    | .000    | .000    |
|                                  | N                   | 261          | 261     | 261     | 261     | 261     | 261     | 261     |
| OC_3                             | Pearson Correlation | .501**       | -.208** | 1       | .460**  | .504**  | .424**  | .558**  |
|                                  | Sig. (2-tailed)     | .000         | .001    |         | .000    | .000    | .000    | .000    |
|                                  | N                   | 261          | 261     | 261     | 261     | 261     | 261     | 261     |
| hrp_1                            | Pearson Correlation | .562**       | -.366** | .460**  | 1       | .528**  | .632**  | .663**  |
|                                  | Sig. (2-tailed)     | .000         | .000    | .000    |         | .000    | .000    | .000    |
|                                  | N                   | 261          | 261     | 261     | 261     | 261     | 261     | 261     |
| hrp_2                            | Pearson Correlation | .381**       | -.308** | .504**  | .528**  | 1       | .564**  | .583**  |
|                                  | Sig. (2-tailed)     | .000         | .000    | .000    | .000    |         | .000    | .000    |
|                                  | N                   | 261          | 261     | 261     | 261     | 261     | 261     | 261     |
| hrp_3                            | Pearson Correlation | .580**       | -.332** | .424**  | .632**  | .564**  | 1       | .588**  |
|                                  | Sig. (2-tailed)     | .000         | .000    | .000    | .000    | .000    |         | .000    |
|                                  | N                   | 261          | 261     | 261     | 261     | 261     | 261     | 261     |
| hpws                             | Pearson Correlation | .523**       | -.219** | .558**  | .663**  | .583**  | .588**  | 1       |
|                                  | Sig. (2-tailed)     | .000         | .000    | .000    | .000    | .000    | .000    |         |
|                                  | N                   | 261          | 261     | 261     | 261     | 261     | 261     | 261     |

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

## 6 TEST OF NORMALITY

| Tests of Normality |                                 |     |      |              |     |      |
|--------------------|---------------------------------|-----|------|--------------|-----|------|
|                    | Kolmogorov-Smirnov <sup>a</sup> |     |      | Shapiro-Wilk |     |      |
|                    | Statistic                       | df  | Sig. | Statistic    | df  | Sig. |
| OC_1               | .192                            | 261 | .000 | .876         | 261 | .000 |
| OC_2               | .289                            | 261 | .000 | .844         | 261 | .000 |
| OC_3               | .222                            | 261 | .000 | .888         | 261 | .000 |
| hrp_1              | .105                            | 261 | .000 | .933         | 261 | .000 |
| hrp_2              | .238                            | 261 | .000 | .726         | 261 | .000 |
| hrp_3              | .253                            | 261 | .000 | .854         | 261 | .000 |
| hpws               | .214                            | 261 | .000 | .709         | 261 | .000 |

a. Lilliefors Significance Correction

## 7 REGRESSION ANALYSIS

### 7.1 REGRESSION ANALYSIS BETWEEN OVERALL ORGANIZATIONAL CLIMATE AND HIGH PERFORMANCE WORK SYSTEMS

| Model Summary <sup>b</sup>            |                   |          |                   |                            |                   |          |     |     |               |               |
|---------------------------------------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
| Model                                 | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|                                       |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1                                     | .501 <sup>a</sup> | .251     | .248              | .26773                     | .251              | 86.965   | 1   | 259 | .000          | 2.033         |
| a. Predictors: (Constant), oc_overall |                   |          |                   |                            |                   |          |     |     |               |               |
| b. Dependent Variable: hpws           |                   |          |                   |                            |                   |          |     |     |               |               |

### 7.2 REGRESSION ANALYSIS BETWEEN OVERALL HUMAN RESOURCE PRACTICES AND HIGH PERFORMANCE WORK SYSTEMS

| Model Summary <sup>b</sup>             |                   |          |                   |                            |                   |          |     |     |               |               |
|----------------------------------------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
| Model                                  | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|                                        |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1                                      | .723 <sup>a</sup> | .522     | .520              | .21392                     | .522              | 282.909  | 1   | 259 | .000          | 2.067         |
| a. Predictors: (Constant), hrp_overall |                   |          |                   |                            |                   |          |     |     |               |               |
| b. Dependent Variable: hpws            |                   |          |                   |                            |                   |          |     |     |               |               |

### 7.3 REGRESSION ANALYSIS BETWEEN TRAINING AND DEVELOPMENT AND HIGH PERFORMANCE WORK SYSTEMS

| Model Summary <sup>b</sup>                        |                   |          |                   |                            |                   |          |     |     |               |               |
|---------------------------------------------------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
| Model                                             | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|                                                   |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1                                                 | .607 <sup>a</sup> | .369     | .366              | .24587                     | .369              | 151.213  | 1   | 259 | .000          | 2.068         |
| a. Predictors: (Constant), Training_n_development |                   |          |                   |                            |                   |          |     |     |               |               |
| b. Dependent Variable: hpws                       |                   |          |                   |                            |                   |          |     |     |               |               |

### 7.4 REGRESSION ANALYSIS BETWEEN COMPENSATION AND BENEFITS AND HIGH PERFORMANCE WORK SYSTEMS

| Model Summary <sup>b</sup>           |                   |          |                   |                            |                   |          |     |     |               |               |
|--------------------------------------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
| Model                                | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|                                      |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1                                    | .608 <sup>a</sup> | .370     | .367              | .24565                     | .370              | 151.957  | 1   | 259 | .000          | 1.777         |
| a. Predictors: (Constant), Com_n_ben |                   |          |                   |                            |                   |          |     |     |               |               |
| b. Dependent Variable: hpws          |                   |          |                   |                            |                   |          |     |     |               |               |