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**DETERMINANTS OF JOB STRESS AND INTENTION TO
LEAVE AMONG FOREIGN WORKERS IN OIL PALM
PLANTATIONS IN SABAH, MALAYSIA**

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DOCTOR OF PHILOSOPHY

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DETERMINANTS OF JOB STRESS AND INTENTION TO LEAVE AMONG
FOREIGN WORKERS IN OIL PALM PLANTATIONS IN SABAH, MALAYSIA

By

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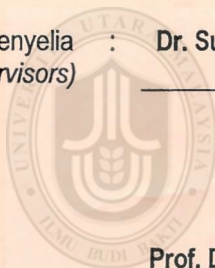
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ABSTRACT

Malaysia is the world's second largest exporter of the palm oil after Indonesia. The oil palm cultivation is spread across peninsular and east Malaysia. While growth is projected to accelerate, the oil palm industry in Malaysia is continuously confronting with issue of acute labor shortage. The labor shortage has forced the plantation management to employ foreign workers from neighboring countries, either legally or illegally. This particular study was undertaken to understand the factors contributing to labor shortage in the oil palm plantations predicted by studying workers intention to leave. It was hypothesized in this study that ethical working climate and psychological contract will influence job stress among plantation workers, which further leads to workers intention to leave oil palm plantations. This study posed 7 hypotheses with the presence of job stress as mediation variable. The study employed cross sectional research design and the data was collected from sample of 497 workers in oil palm plantations from Sandakan, Tawau, Kudat, interior and west coast of Sabah. The study used mixed sampling technique namely cluster and disproportionate stratified random sampling followed by purposive sampling considering the criterion that has been fixed. In order to analyze the data, the study applied smart PLS SEM. The findings indicated significant effect of ethical work climate and psychological contract on job stress and workers intention to leave oil palm plantations. The study also found significant mediating effect of job stress on the relationship between ethical work climate, psychological contract and workers intention to leave. The findings indicate that workers in the oil palm plantations are intended to leave due to the unethical work climate prevalent in the oil palm plantations. The unethical work climate causes low level of psychological contract between the workers and employers, leading to workers intention to leave the oil palm plantations. By extending the factors leading to job stress and worker's intention to leave, the study fills the research gap in the identification of antecedents of labor shortage in oil palm plantations. The study provides valuable insight to the existing theoretical knowledge as well as practical implications to various policy makers such as government agencies, plantation management and non-governmental organizations for better intervention in solving the issue of labor shortage in Malaysian oil palm sector.

Keywords: ethical working climate, psychological contract, job stress, intention to leave, foreign worker, oil palm plantations.

ABSTRAK

Malaysia adalah pengeksport kedua terbesar minyak sawit dunia selepas Indonesia. Penanaman kelapa sawit adalah merentasi Semenanjung Malaysia dan timur Malaysia. Disebalik pertumbuhan yang diramal akan meningkat, industri kelapa sawit di Malaysia terus berhadapan dengan isu kekurangan tenaga buruh yang kritikal. Kekurangan tenaga buruh telah memaksa pengurusan ladang untuk mengaji pekerja asing dari negara-negara jiran, sama ada secara sah atau tidak sah. Kajian khusus ini telah dijalankan untuk memahami faktor-faktor yang menyumbang kepada kekurangan tenaga buruh di perladangan sawit yang diramal dengan mengkaji niat lantik henti pekerja. Kajian ini yang bersandarkan hipotesis iaitu suasana kerja beretika dan kontrak psikologi akan mempengaruhi tekanan kerja di kalangan pekerja ladang yang seterusnya menjurus kepada niat lantik henti pekerja untuk meninggalkan perladangan sawit. Kajian ini telah mengemukakan 7 hipotesis dengan kehadiran tekanan kerja sebagai pembolehubah pengantara. Kajian ini telah menggunakan rekabentuk kajian keratan rentas dan data telah dikutip daripada sampel yang terdiri daripada 497 pekerja di ladang-ladang kelapa sawit dari Sandakan, Tawau, Kudat, Pendalaman and Pantai Barat Sabah. Kajian ini telah menggunakan teknik persampelan pelbagai iaitu persampelan kluster dan persampelan berstrata tidak seimbang diikuti oleh persampelan bertujuan dengan mengambil kira kriteria yang telah ditetapkan. Untuk tujuan menganalisis data, kajian ini telah menggunakan *Smart PLS SEM*. Dapatan kajian ini telah menunjukkan kesan signifikan suasana kerja beretika dan kontrak psikologikal ke atas tekanan kerja dan niat pekerja-pekerja untuk meninggalkan perladangan sawit. Kajian ini juga mendapati kesan perantara signifikan tekanan kerja ke atas hubungan di antara suasana kerja beretika, kontrak psikologikal dan niat lantik henti pekerja. Dapatan ini menunjukkan pekerja-pekerja di ladang-ladang sawit berhasrat untuk berhenti disebabkan oleh suasana kerja tidak beretika yang ketara di perladangan sawit. Suasana kerja tidak beretika menyebabkan kontrak psikologikal yang rendah di antara pekerja dan majikan, menjurus kepada niat lantik henti pekerja-pekerja di perladangan sawit. Dengan menegahkan faktor-faktor yang menyumbang kepada tekanan kerja dan niat lantik henti pekerja-pekerja, kajian ini telah mengisi jurang penyelidikan dalam mengenalpasti penyumbang kepada kekurangan tenaga buruh di perladangan sawit. Kajian ini telah memberikan pencerahan yang bernilai kepada kerangka teoritikal semasa dan juga implikasi praktikal kepada pelbagai pembuat polisi seperti agensi-agensi kerajaan, pengurusan ladang dan badan-badan bukan kerajaan untuk tujuan intervensi yang lebih baik dalam menyelesaikan isu kekurangan tenaga buruh di sektor perladangan sawit Malaysia.

Kata kunci: suasana kerja beretika, kontrak psikologi, tekanan kerja, niat lantik henti, pekerja asing, perladangan sawit

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CHAPTER ONE

INTRODUCTION

1.0 Overview

The studies reasoned with multi-causative factors in explaining workers shortages in manufacturing and service industries are quite common across the world. However, studies in relation to workers intention to leave which is the forerunner of worker attrition, especially in the context of oil palm plantations are quite infrequent. Henceforth a study was conducted to analyze the multicausative issues pertinent to worker shortages in the oil palm plantations, with specific reference to oil palm plantations in the Sabah region of Malaysia, where there is unusual presences of large volume of foreign workers are employed.

Detailing the plantation economy, nature of the work, work organization, and unique situation of workers shortage, introductory chapter comprises of several aspects pertaining to the oil palm plantations. This chapter thus provides an overview of the Malaysian plantation economy, the presence of foreign laborers in the oil palm industry and the scenario of acute labor shortages experienced by the oil palm plantations, especially in the Sabah region of Malaysia. The objective of this chapter provides a description of the context of research and the structure of the study. This chapter thus involves problem statement, research questions, research objectives, significance of the study, viz., theoretical, practical, managerial and policy significance with the integration of scope of the study. The introductory conclude with the way the thesis is structurally organized and an overall summary of the chapter 1.

1.1 Background of the study

Workers are the most important asset of any organization. Motivated workers are a blessing to any organization with due consideration to productivity and performance. A decision of workers lack of motivation to continue in the organization and their interest to leave the organization is circled around several factors. Workers intention to leave, thus, has become a central research topic, through its impact range from sector to sector.

As it is outlined by the HR managers, the foremost challenge of any organization in the modern world is to retain the workforce for continuous business and organizational performance. The human resource (HR) management professionals have a difficult time due to the challenges raised from worker's turnover and that makes issues on “turnover research” to be conducted extensively worldwide (Khatri, 1999). HR managers have given utmost trust on designing worker retention management strategies for the workers so that the organization can utilize the manpower in the best possible way.

Hence, an effort on the part of management to review various determinants of turnover, which correlates worker's turnover or workers intention to leave, needs to be looked into. Workers intention to leave, labor turnover or worker's attrition, like expressions are commonly used by social researchers in order to measure the phenomenon of labor shortages or worker turnover in diverse industrial sectors. Several researchers have tried to explain the whys and wherefores' behind the turnover choices. However, the previous observations based on the literature reviews indicate that the main factor behind worker's intention to leave the current job is the 'intention' itself.

Worker's intentions to leave or the turnover quantity has high impact on several organizations. High turnover ratio in organizations will lead to the high cost of recruitment, selection, training of new workers, low level organization performance, lack of worker continuity and organizational stability. In addition to this organizational impact, labor turnover causes several undesirable events followed by the difficulty in keeping the good worker for a long period in the organization. (Siong, Mellor, Moore, & Firth, 2006; Kumar, Ramendran, & Yacob, 2000).

As it is reported in ETP Roadmap (2010) the Malaysian palm oil industry is abundantly labor-intensive and is currently experiencing an acute shortage of skilled and unskilled laborers in plantations estimated at 20% of the total industry workforce. It is realized very less research has conducted so far exploring and explain reasons behind workers shortage in the oil palm plantations. Henceforth, an understanding of the scenario of oil palm plantations, plantation economy and labor turnover scenario with specific reference to the Sabah region of Malaysia need to be objectively examined into. The scenario here is that the plantation management has to employ more foreign laborers to tackle to the labor shortage issues in the oil palm plantations. The concept of labor turnover is closely linked to workers intention to leave from an organizational setting. Hence it is presumed that the issue of worker shortage needs to be examined with the concept worker's 'intention to leave', and related variables, with specific reference to an oil palm plantation economy.

1.1.1 Overview of Plantations and Malaysian Economy

The oil palm farming kicks off in 1917, despite the fact that the level of growth was very slow at the beginning rate of growth. Nevertheless, within the past fifty years, the plantation sector experienced rapid development via large scale investments in fostering oil palm as one of the most significant crops in the diversification and the growth of agriculture in the country. According to the World Bank (2014) agriculture value added in Malaysia was last measured at 9.33% of GDP in 2013.

Presently, Malaysia is ranked second in the export of palm oil, globally. In 2013, Malaysia produced 20.48 metric tons of palm oil from 5,229,739 million hectares of oil palm plantations. Most of the land utilized for rubber cultivation, cocoa, and coconut were converted into oil palm plantations are the cultivation field of oil palm which keeps on growing. In Malaysia, 50.40% of the oil palm plantations are located in the east region, viz., Sabah and Sarawak states. While 49.60% are the oil palm plantations located in the peninsular area of Malaysia.

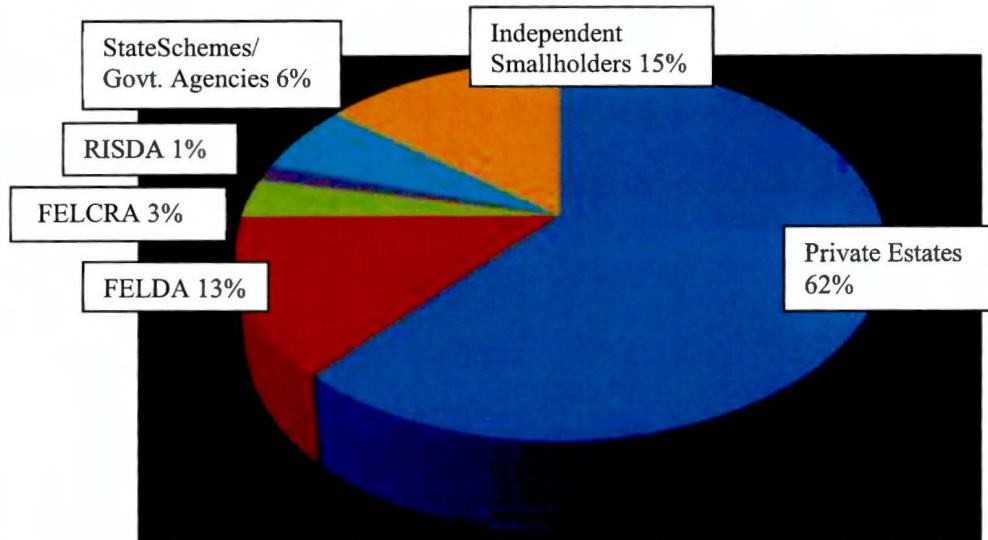


Figure 1.1
Oil Palm Planted Area by Category as at December 2014
Source: Malaysian Palm Oil Board [MPOB], 2014

The chart displayed above clearly shows the segregation of the total oil palm plantation in the peninsular and east region of Malaysia. Though majority of the oil palm estates (62%) are owned and governed by the private estate holders, a considerable proportion are owned by the independent small holders, (15%), state schemes (6%), RISDA (1%), FELCRA (3%) and FELDA (13%).

To improve the average annual plantation yield to 26.2 tons per hectare of oil palm plantation will require the harvesting of over 5 million hectares of mature trees by 2020. Assuming harvester productivity is 1.5 tons per hectare, the industry will require 289,000 workers. There are currently 187,000 harvesters (workers) in the country hence the industry would have required a net addition of 102,000 harvesters (workers) to meet the targets if there was no replacement in mechanization or increase in worker productivity (ETP Roadmap, 2010). Looking at total labor statistics of 580,000 workers, 350,000 are

migrant workers. Evidently, 90% of the workers in Sabah state are from Indonesia (Tirtosudarmo, 2013). Plantations are just an inevitable part of the Malaysian economy.

1.1.2 Oil Palm Plantations and Foreign Laborers

As it is indicated above, Malaysian oil palm industry is facing challenges from workers shortages. This is due in part to the demanding nature of the work in the plantations and the growing number of attractive and alternative job opportunities in other businesses. Lack of mechanization options in plantations creates an over reliance on manual labor for all key activities: land preparation, nurseries, planting, fertilizing, field upkeep and maintenance, harvesting, collection and transportation. As a result, Malaysian oil palm plantations are heavily dependent on foreign workers - currently estimated at 80% of total industry workforce (Economic Transformation Programme [ETP] Roadmap, 2010). In addition to that the oil palm work is not attractive to the local people since the work is dirty, dangerous and difficult with lesser remuneration (Norwana, Kunjappan, Chin, Potter, & Andriani, 2011).

It is reported that in relation to turnover rate in Malaysian scenario, the workers shortage has increased from 9.3% in the year 2009 to 10.1% in the year 2010. While we look into the plantation economy, especially the Malaysian oil palm industry which is abundantly labor-intensive and is currently experiencing a shortage of skilled and unskilled labor in the plantations. Due to the above mentioned reasons, Malaysian oil palm plantations are heavily dependent on foreign workers (ETP Roadmap, 2010). As it is affirmed above, most Malaysians observed to be reluctant to work in oil palm plantations due to tough

working conditions and poor wages, those that do actively seek employment generally originate from comparatively poor and remote areas where there are few opportunities for formal employment (Norwana et al., 2011).

Oil palm plantations are operating with foreign workers from Indonesia and the Philippines in the eastern part of Malaysia, especially the Sabah region. Since local people gradually detach from oil palm plantation work and try to engage themselves in other occupations, more and more foreign workers are needed to fill up vacant positions and the oil palm operations to be run smoothly. It is already reported that the oil palm plantations in Malaysia are facing an acute labor shortage and there is a high rate of worker attrition, especially in small and medium holding plantations (ETP Roadmap, 2010).

Tirtosudarmo (2013) observed that the Malaysia's plantation industry depend most on Indonesian labor. Work in the plantations has the antecedents of low wages, passport control by the employers, and long hours of backbreaking work in addition to workers from exploitation by the brokers. In most cases, workers are subjected to a harsh and remote environment with minimum protection which makes them quit and search for a job in construction sites. Still, the factors leading to labor shortage are seldom documented to have a better retention plan. A proper maintenance strategy for the attraction of local workers needs to be strategies to get an adequate number of workers in the oil palm plantation operations. However, such thoughts are observed as difficult to materialize with the present labor shortage context.

The palm oil industry is now one of the most significant employers in Malaysia and Indonesia, employing as many as 3.5 million workers (IFC, 2010; MPOB, 2012). Large corporate producers in Malaysia are continuing to expand their land holdings and their workforces. Some research (ILO, USDOL, World Bank, 2012) reports have pointed out the factors that are associated with the precarious working conditions in small and medium holding oil palm plantations. Many of these workers are victims of serious labor exploitation. Workers are trafficked into bonded labor; forced to work and live under extreme conditions with limited legal recourse; suffer from abuse or the threat of abuse or are victims of child labor. These exploitations constitute modern forms of slavery (World Bank, 2012).

Migrant workers from Indonesia and Philippines largely make up the plantation-based workforce as a way of achieving a higher income or more consistent work than in their home countries. These workers often migrate to provide for their families and communities back home, which depend on remittances. Workers on palm plantations are often found working and living in remote area within closed plantation complexes, or they are otherwise segregated from larger communities. Under these circumstances, workers are completely at the whim of plantation owners or managers, whose priority is to maximize productivity often at the expense of reasonable working and living conditions and the rights of plantation workers. When faced with a precarious working and living conditions, workers have little choice rather leave the plantation work. However, workers are unable to do so due to the closed nature of plantations (Kumar, Ismail, & Normala, 2014).

Some qualitative research reports (World Bank, 2012; Amnesty International, 2010) have come up in the Malaysian oil palm plantations, detailing the labor shortage or workers intention to leave, in correlation with the condition of work, unethical work climate and the poor contractual relationship between workers and the management. Such reports indicate that workers are often forced to submit work permits, visas, and passports to employers (insecure working conditions), which makes it impossible for them to legally depart from plantations. This often does not prevent migrant workers from leaving the premises. However, if they leave, migrants are highly susceptible to extortion by local police (exploitation), whose primary course of action is to return workers to the plantations where they are employed. Those migrants who successfully escape a plantation are unable to find employment legally in Malaysia. If they do find employment elsewhere, often at small, independent plantations that draw few visits from industry and government regulatory groups making these migrants susceptible to further exploitative labor practices (Amnesty International, 2010).

As it is observed, the resultant manifestation of any of such factor is leading to job stress. Workers usually encounter stress in the workplace because of the excessive demands of organizations for better job outcomes. Correlating the job stress, it is pointed out that the stress leads to some negative effects such as, lack of interest in the job, a lack of concern for the organization or a loss of responsibility at work (Pathak, 2012). The experience of job related stress causes a decrease in the job satisfaction of workers. Stressful individuals feel dissatisfied with their jobs and end up in quitting from the organization

(Paillé, Bourdeau, & Galois, 2010). Furthermore, the effect of job stress on job satisfaction is also examined in several studies (Calisir, Gumussoy, & Iskin, 2011).

Agriculture is being promoted as the third engine of growth and modernization for poverty reduction, as stated in its latest Ninth Malaysia Plan (2006), 5 years development plan (Ninth Malaysia Plan, 2006). Nonetheless, the country is facing issues of worker shortage in oil palm plantations and is extremely reliant on foreign workers coming from Indonesia and Philippines. Contextualizing the topic to the east part of Malaysia which have 62.74% (268,992 people) foreign workers working in oil palm plantations in comparison with the total number of Malaysians (450,396 people, in plantations). Accordingly, the questions raised in this context are; why there is a shortage of workers in the oil palm plantations? Which are the major determinants of workers intention to leave oil palm plantations? What would be the forerunner variables before the workers intent to leave from oil palm plantations?

The above discussion thus provides a brief background of the study on the oil palm plantations thus leading to get awareness about several people management and socio-technical issues, associated with worker shortages. This study henceforth capitalizes on issues regarding the extent of job factors such as ethical work environment and psychological bond leading to a stressful life of workers further explaining turnover intention among the workers in the small and medium scale oil palm plantations. The objective of the research is to seek answers on those job factors in explaining the job stress and turnover intention. Given the utmost importance of sustenance of the plantation economy and the need for retention of this sector with adequate workforce, there is lack

of systematic study so far conducted with the support of people management variables in the oil palm sector. Considering the unique scenario of oil palm plantation in the Sabah region of Malaysia, a prompt understanding of the worker shortages to be made by observing the relationship between determinants of job stress and worker's intention to leave.

1.2 Problem Statement

The report from various governmental and non-governmental sources clearly point out that the oil palm plantations in Malaysia are facing an acute labor shortage and there is a high rate of labor attrition, especially in small and medium holding plantations. Since the Malaysian economy extensively depends on the oil palm business, foreign worker's attrition would considerably affect the plantation operations and the plantation economy as a whole (Abdullah, Ismail, Khomeini, & Rahman, 2011). When one has to say about the nature of work in oil palm plantations, it extends several images of precarious working conditions, which are closely connected to the worker's indifference from work and their intention leave. Such job scenario to be studied with resource management practices, workers motivation and expectations in oil palm plantations (Normala, Kumar, & Ismail, 2014).

Contextualizing the study to current topic especially where there is accumulated number of foreign workers engaged with and the nature of working and living conditions as reported by several researchers as 'precarious' (Trade and Economic Section Report, 2012). Workers on palm plantations are often found working and living in a remote area

within closed plantation complexes, or they are otherwise segregated from larger communities. Workers are completely at the whim of plantation owners or managers, whose major concern it is to maximize productivity, often at the expense of making provision of reasonable working and living conditions and compromising the rights of plantation workers (Amnesty International, 2010). Unfavorable and poor working conditions are cited as a major reason for high turnover intention among workers (Negrin & Tzafrir, 2004). The working and living conditions of these foreign workers need to be correlated with the people management issues prevalent in the oil palm plantations. Attrition of workers is one of the manifestations of the worker's intention to leave from the plantation jobs, though, which is hidden and closely knit with their motivation and expectations. One of the direct effects of unfair working and living condition of workers in the plantation relates to the intention to leave from the plantation (Amnesty International, 2010). It is assumed that a fair and decent working and living conditions can ensure better involvement of the workers in the plantations and can reduce the worker's intention to leave.

Although, there is not any standard framework for understanding the workers turnover process as whole, a wide range of factors have been found useful in interpreting worker turnover. On the worker turnover factors, communication at the workplace, environment, assignment given, salary and benefit received invite better attention from researchers, leading to dissatisfactions among the workers. Among high turnover factors within the workplace include the working environment which comprises of communication at workplace, political environment, colleagues, and manager behavior are closely linked to

worker dissatisfaction (Jamal, 1984; Laurance, 2007; Jex, Beehr, & Roberts, 1992; Moore, 2000).

Many researchers have attempted to answer the question why workers leave organizations (Bluedorn, 1982; Kalliath & Beck, 2001; Kramer, Larish, & Strayer, 1995; Peters, Bhagat, & O'Connor, 1981; Saks, 1996). Some researchers argued individual factors and some other related organizational factors. As such there is little consistency in their observations and findings. This indicates that an explanation of the attrition factor to be made contextualizing the scenario to the oil palm plantations. According to Cho, Laschinger, & Wong (2006), turnover intentions symbolize individual's intention to quit his or her job, exhibiting a breach in the contract of employment. Hellman (1997) stressed that turnover intention is a behavioral intention informing an individual having the mind to leave the job. On this note, Cho et al. (2006) argued that turnover specifies a conflict in a relationship between individuals and their organizations.

Relating to the ethical work climate in the report of Saravanamuttu, (2012) indicates that the situations in the plantations also have certain unique appearances. The plantations are far away and spatially separate from urban life. The workers cannot be reached by public transport and they usually do not have cars, increasing their isolation. For the outsourced workers, working one day in one plantation and another day somewhere else which leads to makeshift shelters and spatial temporality that increase their social and political vulnerability. Migrant plantation workers 'come under a labor regime which exhibits a modernized form of surveillance, control and suppression' citing unethical work climate.

Poor ethical work climate influences worker's intention to leave in an oil palm plantations. By covering an Jakarta Post report, especially on the unethical work climate of workers working in oil palm plantations of Sabah regions of Malaysia, it is well stated that (Jakarta Post, 2008) the working hours are long, the laborers are poorly paid and the worker can be easily abused. For instance, 90% of the plantation workers in the Sabah region of Malaysia are Indonesians, whom are hired for harvesting, weeding and other routine job. They do not essentially get the privileges and security that a Malaysian worker would get—the work is manual, the hours are long, and the laborers are poorly paid.

Negrin and Tzafrir (2004) argue that financial insecure condition of workers generates stress among them and they often quit from organizations due to financial reasons in order to search the better opportunities. Flexibility for estate managers translates into insecurity for the workers, which the oil palm plantations are enhanced by a wage system that pays either a very low daily wage or a higher piece rate wage (particularly for harvesters). In the later case, the wage outcome can vary considerably according to weather, terrain or season. A piece rate that looks good in the main harvest season can be disappointing in the off- season, when the quantity of fruit bunches is less. The monthly wages from such a system can range from minimal (MYR 1000 or USD 320 per month) to very low (MYR 100 per month) when compared with the average wage level in Malaysia. Working condition factors which include the wage, safety, security, welfare facilities and decent living conditions thus linked to job stress and worker's intention to leave in the oil palm plantations (Saravanamuttu, 2012).

The precarious working and living conditions are prevalent in the oil palm plantation further influence the psychological contract between the workers and employers leading to worker's 'detachment at work' initially and from there to 'workers intention to leave' or 'quit the work'. Disconnected workers are frequently displeased with the work there by aggressively express this feeling. The adverse influences of such workers endlessly influence other workers in the team and destroy accomplishment of engaging work-mates (Gallup, 2001).

Separated workers who are severed from their jobs, have a propensity to be suggested, less competent and less committed to their productiveness; they are less happy with their personal lives, experience more stress, feel insecure about their work than their co-workers (Gallup, 2001). The psychological bond needs to be taken into serious consideration since it causes several detrimental effects. When worker in the organization feels that organization is not delivering what is promised, this cause reduced satisfaction, and can lead them to leave the organization, neglecting their work and so on (Turnley & Feldman, 1999). The effect of poor psychological contract may in the long-term lead to poor labor management relations and it further affects the business operations of plantations as a whole.

The predicted indication of labor shortage in oil palm plantations is thus intention to leave, with a prior experience of job stress among workers. Considering the wider picture of oil palm plantations, the present study firmly focused on the working and living conditions of foreign workers, ethical work climate, and psychological contract issues

and to what extend such factors leading to job stress and workers intention to leave from the oil palm plantations in the Sabah region of Malaysia. It is presumed in this research that such factor would be in a position to explain the workers shortages issues in the oil palm plantations.

1.3 Research Questions

1. What is the level of work climate, psychological contract, Job Stress and Intention to Leave?
2. Do ethical work climate and psychological contract have any direct relationship with job stress among foreign workers in oil palm plantations?
3. Do ethical work climate and psychological contract have any direct relationship with intention to leave among foreign workers in oil palm plantations?
4. Does job stress have any direct relationship to foreign workers intention to leave oil palm plantations?
5. Does job stress mediate the relationship between ethical work climate and psychological contract in its relationship with intention to leave among foreign workers in oil palm plantations?

1.4 Research Objectives

General objectives of this study are to examine the influence of ethical work climate, psychological contract on job stress and intention to leave among foreign workers in oil palm plantations in Sabah, Malaysia. In order to explain the relationship between the

independent and dependent variables, this particular study poses following research objectives.

1. To examine the relationship between ethical work climate and job stress among foreign workers in oil palm plantations.
2. To examine the relationship between psychological contract and job stress among foreign workers in oil palm plantations.
3. To examine the relationship between ethical work climate and intent intention to leave among foreign workers in oil palm plantations.
4. To examine the relationship between psychological contract and intention to leave among foreign workers in oil palm plantations.
5. To examine the relationship between job stress and intention to leave among foreign workers in oil palm plantations.
6. To ascertain the mediation effect of job stress in its relationship between the antecedents of ethical work climate and psychological contract on intention to leave among foreign workers in oil palm plantations.

1.5 Significance of the study

The significance of the study is four fold viz., theoretical, practical, managerial and policy level that ensure better working and living condition of the oil palm foreign workers in Malaysia. It can be detailed as;

1.5.1 Theoretical significance

Theoretical consequences are linking two theories are less subjected and researched in oil palm plantations, especially human resource theories, in order to arrive at sound understanding of the phenomena under study. The observations related to theoretical models, which are coming from human resource management fields such as Job Demand – Resource Theory (JDR Theory) and Social Exchange Theory (SET Theory) have less footing so far, since the oil palm plantations have remote habitation and are closed to the local as well as international world to document better information. This study will add to the supplementary literature through quantitative data collection process that will provide better insight into the living and working conditions of the workers, present human resource management practices, ethical work place practices and all those leading to a psychological contract, which answers workers intention to leave from the oil palm plantations in Malaysia (labor shortage issues in oil palm plantations). The study facilitates the advancement of the literature in the area of job stress and workers intention to leave as well as the determinants of such consequences in the oil palm plantations.

1.5.2 Practical Significance

The study visualizes several significant closely with the practitioners can examine the effect of determinants (ethical work climate and psychological contract) on job stress and workers intention to leave from oil palm plantations. The study observations can indicate the way forward to improve and maintain oil palm plantation operations and the job image amongst business stakeholders worldwide. The oil palm companies and practitioners can examine the effect of determinants (ethical work climate and

psychological contract) on job stress and workers intention to leave that invites better appreciation from Roundtable on Sustainable Palm Oil [RSPO].

The results of this study can provide a better platform to improve attitudes towards oil palm plantation job and the predictors in this model will show evidence of its effect on workers attrition. It is very important for the oil palm companies to look into the unique oil palm nature of work, which is physically and mentally demanding for the betterment of workers attitude towards work. A positive work attitude among workers is important for the oil palm companies to ensure better corporate plantation image. The workers attitude toward an organization is well connected in getting better corporate image which is the overall results of the interaction between workers and different stakeholders of the oil palm companies. A good employer image which makes provision of better quality of life of the oil palm plantation workers, will add value to the products coming out of palm oil among consumers.

Several stakeholders may be able to improve the working and living conditions of workers in oil palm plantations. The NGOs also can get involved by making provision for better facilities to the workers in the oil palm plantation by ensuring their welfare conditions. The consequences could give direction in NGOs intervention towards the betterment of working and living conditions. The NGOs working in the oil palm plantations areas can intervene in making provision of decent working and living conditions, in liaison with the government and plantation management initiatives.

1.5.3 Managerial Contribution

Labor scarcity is the main issue confronted by the plantation management as well as the Malaysian government. Though the majority of large scale plantations are implementing welfare and labor policies which are affirmative to the plantation workers, the small holder plantations are still away from its implementation. The literature available so far is devoid of empirical observations and this proves that the plantation management activities are whether worker friendly or keep distance from the precarious labor practices. The findings can understand the present status of working and living conditions of oil palm foreign workers, small medium holding plantations that support the plantations management to ensure better labor supply and maintain the oil palm plantation economy with decent working and living conditions for the workers in oil palm plantations.

Studies that validate the claims made by several human rights international organizations (Amnesty International, 2012; Verite, 2012; United States Department of Labor [USDOL], 2010), on precarious working conditions in oil palm plantations. These claims are more into human rights perspective than a human resource management perspective which supports the government to ensure better labor-management practices that need to be implemented by the plantation management to sustain plantation operations and the retention of workers in general and foreign workers in specific.

The small and medium oil palm plantations could benefit by gaining new insights into job stress and intention to leave, most obvious to the local and foreign workers. It may be

interfered by the study findings that ethical work climate, psychological contract are all salient factors that cause job stress and workers intention to leave from plantation work. The study further suggests that small and medium scale oil palm plantations can concentrate on improving working and living conditions, ethical work climate and psychological contract alleviating the it wishes to represent at best.

Oil palm companies can better handle job stress and workers intention to leave issues which can significantly improve the oil palm plantation image. The findings can give novel ideas for handling job stress and workers intention to leave and negative attitudes. The interventions of the determinants (ethical work climate and psychological contract) are created and maintained for workers, and must be a priority agenda for most small and medium oil palm plantations due to plantation economies situational instability both locally and globally.

1.5.4 Policy significance

Labor shortage is one of the major issue faced by the country in general and oil palm plantations, in specific, due to several factors which are intrinsic and extrinsic in nature. This study on the ethical work climate and psychological contract correlating with the worker occupational stress and worker intention to leave from the plantations would support in gathering ground facts and figures pertaining to the living and working conditions of the workers in oil palm plantations with its resultant effect of job stress and workers intention to leave. The findings support the Malaysian government to get a better understanding of the foreign workers scenario and develop better labor management

practices and policies that guarantee better monitoring and evaluation on small and medium holding plantations with a decent working and living conditions for the foreign workers in oil palm plantations. Moreover the management can relate to the working conditions effect on worker job stress and look into a mechanization option with the support of government or allied stakeholders

Factors internal as well as external to workers working in oil palm plantations need to be better evaluated to get an idea of why workers do not want to work in oil palm plantations or they want to discontinue from the oil palm work. Hence, through this study, it is expected that the observations and findings would provide insight for the Malaysian government to develop better policies that ensure decent living conditions and working condition of the workers in oil palm plantations.

1.6 Scope of the study

The scope of the study is limited to the Sabah region of Malaysia, since the majority large, medium and small scale oil palm plantations are employed with foreign workers. These foreign workers are the backbone of oil palm plantations. The oil palm industries have to depend on these foreign workers in order to maintain the day to day operations due to lack of participation of local workers. Hence a better living and working condition is a factor which invites better attention among the stakeholders, in order to retain foreign workers in the industry and sustain the oil palm business. This particular study thus provides better insight into the determinants of job stress and which lead to workers intention to leave from the oil palm plantations in Malaysia.

The study was focused mainly in the Sabah region of Malaysia due to high representations of the foreign laborers. Thus, the study concentrated on the five divisions of the Sabah region which include, Tawau, Sandakan, Interior, West coast and Kudat. The observation was more suitable on these locations considering the labor shortage severity, which closely linked to ethical work climate and psychological contract which are more precipitated in these regions.

Most studies in the past have followed qualitative researches in explaining the precarious working and living conditions of the oil palm plantations. These qualitative researches have less predictability with due consideration on the methods followed by the researchers. Though the issues pertaining to work and living conditions are reported in general by several NGOs and International Organizations (Amnesty, 2010; Verite, 2012) so far clear identification of antecedents of worker's intention to leave (labor shortage) is less researched into. Moreover, seldom has any research conducted with the support of quantitative research to establish the factors correlated to work and living conditions of the oil palm plantations detailing the causative factors of job stress and worker's intention to leave. The study ensured better predictability and generalization of the observations with the support of positivists approach. This particular study thus paved better insight into the specific antecedents of the worker shortages which were measured in the form of job stress and workers intention to leave the oil palm plantations. The study thus provided supportive evidences to the government, plantation management, and the NGOs to have effective interventions in order to alleviate the precarious working and living conditions and the workers shortages in the oil palm plantations.

This study was further to evaluate the application of Job Demand and Resource (JDR) and Social Exchange Theory SET on the theoretical model developed in this research. Job Demand and resource theory (JDR) indicates that stress will be the consequence of the challenges raises from the demands of work and scarcity of resources. Such situation developed physical as well as mental challenges among the workers leading job stress and it would reflect in the form of workers intention to leave the organization. The scope of the study clearly related to the application of Job Demand and Resource Theory of variables selected for the study like unethical work climate and physiological contract having it closed relationship with precarious working and living conditions in the oil palm plantations. The study clearly establishes the challenge of the task, tools and environment developed stress among workers leading their intention to leave. It is observed in the research that the scarcity of resources developed job stress and its leads to workers intention to leave from oil palm plantations proving the scope of theoretical application in this research.

Exchange of transaction is fundamental to any work performance in organizations. This scenario is not much different in oil palm plantations. This particular research has considered Social Exchange Theory and its application on the variables in the oil palm plantations. It is hypothetical in this research there is a high level of Social Exchange between workers and plantation management. It is expected by the workers that there should be a congenial working and living conditions in oil palm plantations. The readiness of workers to exchange of knowledge, skill and effort on their work highly dependent on the realization of what is promised and what is obtained from the

management. They expect a fair deal between management and themselves in relation to their work. Any change in the transaction between the expectation and transaction developed dissatisfaction among workers and they tend to wind up their contract and leave the work. Hence, exchange is one of the major factors in relation to people, process and management in order to operate any business. The scope of the is closely linked to social exchange theory and its application between management and workers in its effect on job stress and workers intention to leave from oil palm plantations.

1.7 Definitions of key terms

1.7.1 Intention to Leave

With due considerations to this conceptual framework, this particular study considers its definition of intention to leave as the foreign workers intention to quit the present small and medium scale oil palm work and look forward in finding another job in the near future in other oil palm plantations or some other jobs (Weisman, Alexander, & Chase, 1981).

1.7.2 Job Stress

This study considers its definition as the harmful physical and emotional responses that can happen when the oil palm foreign workers faces a conflict between job demands and the amount of control a worker, he/she has over meeting these demands. Job stress is thus defined as the resultant outcome of the combination of high demands in a job and a low amount of control over the situation (Ivana & Ilic, 2006).

1.7.3 Ethical Work Climate

With due attention to this conceptual framework, this study considers definition of ethical work climate as an organizational environment, in small and medium scale oil palm plantations, that has ethical content in organizational practices and procedures (in this research, plantation). It is identified in the form of an organizational environment where the ethical issues are handled with ethical content, existence of shared perception of a formal, written code of ethics, policies are framework ethical behavior and no uncertain terms that ethical behaviors will not be tolerated and people will be promptly reprimanded on violation of such action (Schaeffer, 2012).

1.7.4 Psychological Contract

With due considerations to this conceptual framework, this study consider its definition as; a psychological contract in this research is the “perceptions of both parties” via, the plantation owners or managers and the foreign workers to issues such as the employment relationship, the organization and the individual, the mutual promises and obligations implied in the relationship between these two parties, that is, the employer and the worker (Guest, 2007).

1.8 Organization of the Thesis

The current study is comprised of five chapters.

Chapter 1: In this section, the researcher explored the phenomena by giving a brief introduction of the overall study. The chapter also comprises the background of the study,

problem statement, researcher questions, objective of the study, followed by the significance of the study and finally organization of the thesis.

Chapter 2: In this section, the researcher provides the essentials of qualitative and quantitative finding to the past studies with the related literature, relevant to this study, with particular focus on ethical work climate and psychological contract leading to job stress and workers intention to leave the plantation. This encompasses the definition of the constructs and the relationship between the factors, followed by the underpinning theories of the past and present with models, operationalized the issues related to workers in plantation, theoretical review, discussion of the dimensions of four variables, sector (oil palm plantation) performance as well as the relationship between government managerial, people.

Chapter 3: Chapter three discusses the research methodology employed in the present study. It also includes a research framework which arises from the review of relevant literature, propose research hypothese. Moreover, this chapter discusses the system used in the selection of measurement, sampling design, the procedures use in data collection and data analysis techniques.

Chapter 4: In this section, the researcher provides analysis based on quantitative research analysis and discussion based on the findings of the study.

Chapter 5: The chapter five leads to theoretical, practical and policy implication, suggestion for future research and conclusions based on the findings of the study.

1.9 Summary

This particular chapter provides a detail understanding of the background of the oil palm economy of Malaysia in general and the challenges faced by the oil palm plantations in relation to worker shortages with its close association to foreign worker's working and living conditions. The challenges are observed from ethical work climate and psychological contract leading to job stress and foreign workers intention to leave from oil palm plantations. This chapter thus detailed the background of the study and problem statement with the incorporation of research questions leading to well defined objectives, scope and significance of the study. The next chapter followed the conceptual, hypothetical and theoretical underpinnings followed by the study, in the review of literature portion.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

This chapter reviews which contains the systematic identification, and inquiry of research papers, periodicals, magazines and allied documents containing data associated with the research problem. The review of literature provides a detailed understanding on what knowledge already exists for the researcher to get a grip on the subject matter under study. How far the problem formulated is relevant for exploration and explanation will be answered through this portion. It adds up the existing knowledge base and it also provides an opportunity for research scholars to familiarize his/her with the current knowledge and update him/her understanding of the topic he/she has selected for the study. Accordingly, the chapter will also deal with important literature that will help to understand advancement of knowledge and interpreting the results of this convergent study in the area of ethical work climate and psychological contract on job stress and intention to leave among workers from the oil palm plantation.

2.1 Concept Definition

This chapter consists of literature that supports the researcher to the concept that has been undertaken to study the topic of interest and the literature that substantiates the assumption, which has been made in the form of hypothesis.

2.1.1 Intention to leave

Recognizing the behavioral intentions of turnover is very vital in avoiding undesirable results of intention to leave (Fishbein & Ajzen, 1975). Behavioral intentions have been shown to be the key precursors and pointer of the actual behavior of turnover (Fishbein & Ajzen, 1975). Thus, in bits to identify turnover, one must first identify the behavioral intentions.

The intent to exit the organization is a psychological procedure that scholars find difficult to understand, however, intent to leave has been explained as a conscious and careful determination to exit the organization (Tett & Meyer, 1993). The Intention to leave as explained by Purani and Sahadev (2007); Weisberg (1994) is a worker's idea to exit his current job with the aim of finding a new job within a short period of time.

Studies have demonstrated that the only meaningful connection with turnover is the intention to quit (Mobley, Horner, & Hollingsworth, 1978). The outcomes revealed that behavioral decision on intent to leave will be a good pointer of turnover than job satisfaction, thinking of quitting, or planning to search. In fact, these outcomes conclusively showed intention to leave as the major precursor to turnover. Comparable outcomes have also shown this model and established strong links between intention to leave and turnover (Weisman, Alexander, & Chase, 1981).

Several variables that have been studied have also been associated with worker's intention to exit. Many scholars tend to link job fulfillment with workers turnover e.g. disgruntled workers are likely to abandon their job more frequently than content workers

(Churchill, Ford & Walker, 1974). Porter and Steer (1973) recommended that workers and organizational level variables should be incorporated because it decides the workers' conduct and thought that influence their decision either to quit or remain in the organization. However, most of the studies concur that efficient dedication has convinced an adverse effect on the worker's intention to quit the organization (Conway & Monks, 2009). It is proposed that contextual model of worker intention to exit required a number of factors such as routinization, communication, distributive justice and upward mobility and various situational (opportunity) that affect worker's choice to remain or quit the organization (Martin, 1979). Organizational surroundings as well as the cultural surroundings such as team, respect for people, orientation, etc. have enormously helpful impact on worker retention (Sheridan, 1992).

In addition, morale is also a significant factor inducing aspect of workers' opinions or behavior to quit or remain on the job. If disagreements and matters concerning worker's job life are handled well, perhaps it can alter workers resolution to leave the organization (Johns, 2010).

Mobley et al. (1978) state the associating factors in a worker's quit procedure are characteristic in many turnover literature. The two major points of concern are the evidence of turnover being a sequence or course of incidents and the significant correlation between intention to leave and turnover. Behavioral intention to leave and actual terminal action of leaving is in direction proportion.

Intention has been identified as the remote pointer to actual behaviour (Sommer & Haug, 2010). Sheeran (2002) proofed that there is a strong link between intention and behaviour. Thus, this research assesses the intention to leave so as to ascertain the ultimate effect which is actual quitting. Even though the intention to quit will not essentially result in actual quitting, but it will impact negatively on the company's productivity as a result of job ineffectiveness, withdrawal and truancy (Kivimaki, Vahtera, Elovaino, Virtanen, & Siegrist, 2007).

Studies have revealed a strong association with high intention to leave as a strong pointer to actual turnover. The studies on intention to leave instead of the actual leaving were carried out because many facts revealed that intention is the remote pointer to the actual behaviour (Fishbein & Azjen, 1975; Skinner, 1989; Stallworth, 2003).

Turnover intention or intention to exit is described as “a mindful and thoughtful will be to quit the organization” (Tett & Meyer, 1993). According to Ongori (2007), turnover intention is the idea to quit an organisation which is a precursor to the actual quitting. Turnover intention is a psychological factor of the propensity to quit and it is directly associated with turnover (Janseen, 1999) and the will to quit the organization” (Tett & Meyer, 1993). The above deliberations thus deliver a conceptual understanding on the term intention to leave among workers in oil palm plantations in general.

Table 2.1
Summary of Intention to leave Literature Review

Intention to leave	Author	Variable
	Martin TN Jr. (1979)	• Routinization • Communication • Distributive justice • Intention to Quit • Distributive justice
	Sheridan, J. E. (1992)	• Organizational surroundings • cultural surroundings • respect for people • worker retention
	Johns, G. (2010)	• Morale • disagreements • quit or remain on the job • resolution to leave the organization
	Sims, R. L., & Keon, T. L. (1997)	• Person-organization fit • Value congruence • Organizational ethical values • Turnover intentions • Organizational obligation
	Bakker, A. B., & Demerouti, E. (2007)	• turnover (intentions) • resignation (intentions) • truancy work engagement

2.1.2 Job Stress

The term stress has been differently described by scholars. Stress is often confused and hidden in different and confusing views. Several writers have observed the absence of a common agreement in the meaning of stress (Alluisi, 1982; Beehr & Newman, 1978; Cofer & Appley, 1964; Janis & Leventhal, 1968; McGrath, 1976; Schuler, 1980).

Hans Selye (1976) defines stress as, "the non-specific response of the body to any demand made upon it". A study by Beehr and Newman (1978) "stress is a condition arising from the interaction of people and their jobs and characterized by changes within people that force them to deviate from their normal functioning". Whenever one feels that his integrity is endangered and one has to synchronize his or her energy towards his/her protection, one is in stress. Stress therefore, is occasioned reaction to outer conditions that give rise to visible, psychological, and behavioral change of organization respondents. It is a composite picture of restlessness, tension and anxiety. Stress is often understood as something negative. "Workplace Stress" is the tangible damage and expressive reactions that can occur if a disagreement exists between worker's workloads and the extent of his ability to handle the workloads. Accordingly, joint high job demands and an inadequate ability to handle the workloads result to stress (Ivana & Ilić, 2006).

According to Robbins (2001), stress is a changing situation in which the worker is faced with chance, constraint or request associated with what the individual desires for which the result is seen as unsure and vital. Stress can result as environmental, organizational, and individual factors (Matteson & Ivancevich, 1999; Cook & Hunsaker, 2001). Organisational based variables according to Greenhaus and Beutell (1985) are identified to cause work stress for workers in establishments. Occupational stress as defined by HSE is "the adverse reaction people have to excessive pressures or other types of demand placed on them.

Weiman (1977) suggests that occupational stress is the sum total of factors experienced in relation to work which affects the psychosocial and physiological homeostasis of the worker. The individual factor is termed a stressor and stress are the individual worker's reaction to stressors." The definition is made clearer by French, Caplan and Van Harrison (1982) who expand the definition and posited that 'occupation' is "really a surrogate for a variety of characteristics of the job and of the person," re-emphasizing that stress is a many faced incident and an expression often used in diverse manners.

Concurring with the definition of 'stress-process' work stress is a conflict between the worker and his work situation (Humphrey, 1998). A more direct meaning was given by NIOSH (1999), who described 'work stress' as physical damage and expressive reactions that take place if the workload and the worker abilities and the means to handle the workload are incompatible. The theory presented by Lazarus (1991) states that occupational stress is an activity concerning an interaction amongst a worker and his job situation. The worker's reactions to job stress can be psychological, physical or both (Cooper & Cartwright, 1994; Santos & Cox, 2000), this often classified as severe, post traumatic or chronic stress. Stress is the physical damage and expressive reactions that take place if worker's abilities, means or wants are not equal to the workload assigned.

According to Beehr and Franz (1987), stress is frequently described to fall into three groups namely stimulus-based, response-based and stressor strain interaction (Beehr & Franz, 1987).The stimulus-based technique considers stress as outward influences (situational or environmental) impacting on the creature (worker) in a troublesome

manner. The response-based methodology describes stress as an worker’s psychological or physiological reaction to the organizational or circumstantial influences. The third category which is the stressor-strain interaction methodology combines the first two explanations as it describes stress as both a stimulus (sources of stress or stressor) and also the consequence or symptoms of stress and injuries. The above discussions thus deliver a conceptual understanding on the term job stress that prevalent in oil palm plantations.

Table 2.2
Summary of Job Stress Literature Review

Job Stress	Author	Variable
	Matteson, M. T., & Ivancevich, J. M. (1999)	• Individual factors • Decision-making process. • Stress
	Cook, C. W., & Hunsaker, P. L. (2001)	• Organizational factors • Decision-making process • Stress
	Greenhaus, J. H., & Beutell, N. J. (1985).	• Stress • Occupational stress • Environmental factors
	Wakker, E. (2005)	• lower wage, • gender discrimination, • safety, • security, • health • condition, • work load • Job stress
	Schaufeli, W. B., & Bakker, A. B. (2004)	• poor level of psychological contract • lack of resources • poor occupational health • Job Demands-Resources (JD-R) model • Job strain, burnout, work engagement • Job stress

2.1.3 Ethical Work Climate

Ethical climate is a subcomponent of an organization's culture. Cullen, Parboteeah and Victor (2003) defined the ethical climate as components of the individual's environment as perceived by the members. Also, ethical climate is the psychological environment in which individual behavior takes place (Buchan, 2006). The ethical climate gestures to workers what are acceptable behavior (Trevino, Butterfield, & McCabe, 1998). In fact, an organization's ethical climate according to Victor and Cullen (1987) is as a result of the worker's behavior in the organization. Every worker of an organization gains knowledge via proper and improper settings and also through socialization processes the right input to the organizational ethical climate (Cooper, 1998 ; Victor & Cullen, 1987), workers react to this ethical climate in a collective manner (Ott, 1998). Organizational ethical work climate (EWC) is described as an "organizations shared perceptions of what ethically correct behavior is and how ethical issues should be handled".

One of the dominant theory and measure of Ethical Work Climate (EWC) developed by Victor and Cullen (1987, 1988). Even though researchers have identified problems with this theory, such as inconsistencies with regard to its limited theoretical scope and troubling psychometric properties, it is the most widely utilized framework for conceptualizing and testing EWC. In Victor and Cullen's (1987, 1988) theory of EWC, ethical climates reflect workers' collective perceptions of ethical events, ethical practices, and ethical procedures. These collective perceptions are identified along two dimensions: the ethical criteria used for organizational decision-making, and the loci of analysis used as a referent in the ethical decision-making process. The ethical criteria dimension

identifies the collective decision-making framework employed in making moral judgments involving the social system. It is grounded in Kohlberg's (1969) theory of cognitive moral development. The loci of analysis dimension identify the referent group to be considered when applying ethical criteria to a moral problem involving the social system. It borrows from role theory (Merton, 1957), which notes that individuals' behaviors and attitudes are differentially influenced according to reference groups (e.g., locals or cosmopolitans) and the roles individuals assume within those groups. Responsibility of building an ethical work climate rests on the hands of top management and it is a mutual series of opinions on what is considered an appropriate conduct and how moral matters will be treated. Victor and Cullen (1987) explains organizational ethical climate as an establishment's "mutual view of what is morally appropriate conduct and how moral matters should be treated". The concept of ethical work climate appear to a large degree from organizational processes conveying managerial prospect such as moral behaviors and processes for resolving ethical problems (Peterson, 2002; Cullen, Parboteeah, & Victor, 2003; Tsai, Huang, & Yen, 2008; Mulki, Jaramillo, & Locander, 2008; Goldman & Tabak, 2010; DeConinck, 2011).

Substantiating the unethical work climate, it is pointed out in several press reports and research reports (Schaeffer, 2012; The Jakarta Post, 2008) that workers in oil palm plantations are likely to come from neighboring countries in search of better openings or from poor rural communities nearby oil palm plantations. Inadequate openings in their communities mean men, women and children must labor for seasons in palm plantations (Schaeffer, 2012). Migrants brought by labor agents are placed in isolated plantations in

remote rural areas with practically no means of mobility, stopping them from escaping (The Jakarta Post, 2008). They are forced stay in a poor environment with no access to clean water, lighting and other essential amenities. They are also segregated by the absence of community assistance, cultural barriers and discrimination (The Jakarta Post, 2008).

Several women, mostly the spouses of temporary worker assist their men meet their target but are not paid targets while there may be a preference to employ women as casual workers rather than permanent workers to avoid costs associated for regular time off for menstrual leave (Down to Earth, 2007). Plantation organization also compels female to go in search of firewood for cooking and fetch clean drinking water, all of which they must convey home (Wakker, 2005). The stress related to lower wage, gender discrimination, safety, security, health condition, workload, etc. all is well correlated stress as resultant manifestation of procedural injustice prevalent in the oil palm plantation.

Past studies have examined several stressors, also taking into account worker's role, specific workloads and attributes, and aspects of the manual job situation (Hart & Cooper, 2001; Kahn & Byosiore, 1992). The Amnesty international report (2012) on the labor abuse of foreign workers in Malaysia confirmed the presence of an immoral work atmosphere. Organizations are expected to sustain a safe working atmosphere and must have indemnity that covers industrial hazards. Nevertheless, most foreign workers work with hazardous machines or use hazardous chemicals, most of the time they do so

without defensive kit or a perfect grasp of how to guard themselves. If they are involved in disasters at work, their organization may decline to pay for their medical care and in some case force them to go back to their home countries.

Relating the topic to value congruence in the ethical work climate, it is indicated that value congruence was considered as an important factor that effected upon the consequences of ethical work climates (Ambrose, Arnaud, & Schminke, 2008; Sims & Keon, 1997; Sims & Kroeck, 1994). Value congruence or the person-organization fit are two terms that are interchangeably used. These terms suggest that the ethical values of the workers should be in line with the organizational ethical values. Empirical evidence suggested that ethical fit is significantly associated with turnover intentions and organizational obligation (Ambrose et al., 2008; Sims & Kroeck, 1994).

A study by Tepper (2000) in a selected sample of city inhabitants shows three types of justice exist and it includes: distributive, procedural, and interactional – to dejection and psychological weakness. Elovainio, Kivimaki and Helkama (2001) associated two justice aspects —procedural and relational—to occupational strain (made up of anxiety, despair, and loss of focus). More studies (De Boer, Bakker, Syroit, & Schaufeli, 2002) have shown a strong correlation between health conditions and distributive together with procedural justice.

Ethical work climate influences worker intention to leave in oil palm plantations. By covering an Jakarta Post report especially on the unethical work climate of workers

working in oil palm plantations of Sabah region of Malaysia, it is well stated that (Jakarta Post, 2008) the working hours are long, the laborers are poorly paid and the worker can be easily abused. For instance, 90% of the plantation workers in Sabah are Indonesians, who are hired for harvesting, weeding and other routine job, and do not essentially get the privileges and security and the work is manual, the hazardous and the laborers are poorly paid.

It is reported that the immigrant workers come to Malaysia in search of greener pastures and as a way to cater to their families and solve the poverty problem. On arrival, many of these workers labor in circumstances that reminiscent of job abuse. Their wages may withhold for months or may have virtually no money to take home every month after settling their employer's monthly charge for the renewal of the work permit, pay deductions for mistakes, and expenses for food and rent. Most of them labor lengthy hours, plus extra hours for which they receive no pay. Also many labor daily as well as weekly.

Spoken and bodily abuse is rampant; women are vulnerable to sexual pestering and attack occasionally, as well as rape. Many workers work with risk machines or use hazardous chemicals; most of the time without defensive kit or counseling on how to protect themselves against injury. When they are involved in mishaps at work, their organization may decline to pay for their medical care and in numerous cases compel to go to their home countries. Most of them live in poor environments. Most of the job done by the foreign laborers cross-examined for this study are compulsory work. Laborers may be restricted to their work environment, intimidated with the force, or else stay on the

employment. Many have borrowed money with high interest rates, counting on the assurance of a good job in Malaysia, only to discover that they are in situations that can be likened to the debt burden. Besides male laborers are hired on the based on deceit or scam —they are deceived about the nature of the job, the wages paid, the duration of work and other terms of the job. When laborers are hired based on deceit or scam into forced labor or other forms of labor abuse, they are victims human of trafficking (The Jakarta Post, 2008).

Work related stress is a topic of research in relation to several factors which are individual as well as organizational. Many factors prevalent in the organizations leading to workers stress correlating the perception of workers towards the ethical work practices. The above discussion clearly indicates that the sector of oil palm having the job characteristics related precarious working conditions and several unethical labor practices inclusive of human rights violation causing workers stress at work. Though such deliberations are ongoing, empirical evidence to prove such cause effect leading to workers' intention to leave is less established.

Table 2.3
Summary of Ethical Work Climate Literature Review

Ethical Work Climate	Author	Variable
	Victor, B., & Cullen, J. B. (1987)	• Ethical climates • collective perceptions • ethical practices • ethical procedures • collective perceptions • Ethical work climate • Moral matters • Leadership
	Victor, B., & Cullen, J. B. (1988)	• Ethical decision-making process • moral judgments
	Hart, P. M., & Cooper, C. L.(2001).	• Stressors • Workloads
	Kahn, R.L., & Byosiore, P. (1992).	• Attributes • manual job situation
	Ambrose, M., Arnaud, A., & Schminke, M. (2008).	• ethical work climate • value congruence

2.1.4 Psychological Contract

The concept of psychological contract arose from equity theory (Adam, 1965) and in recent times from studies done on organizational justice (Conway & Briner, 2005; Rousseau, 1995). Procedures of organizational justice generally entail assessment of procedural, distributive and interactional justice. The aim of these procedures is to obtain fair and equitable views both as an independent and as a criterion construct. A psychological contract is a series of unrecorded beliefs exist and linked each worker to its employer (Armstrong, 2009). As per Guest (2007), the psychological contract consists of the “perceptions of both parties” to matters that include job association, both individual

worker and its organization, with a shared benefits and duties as entailed in the relationship between those two parties, that is, the employer and the worker.

Running parallel and independently to the early psychological contract work, the seminal works of Homans (1961), Blau (1964) and Gouldner (1960) characterized the beginnings of social exchange theory, and were themselves influenced by the earlier work of Mauss (1925) and Malinowski (1922). Homans (1961) provided a skeleton theory of exchange in the context of how individuals interacted within groups (Coyle-Shapiro & Conway, 2005) that was developed by Blau (1964). This study focuses on the work of Blau (1964) and Gouldner (1960) as together, their work represent the fundamental ideas of social exchange theory (for a more comprehensive review see Cropanzano & Mitchell, 2005) in order to contextualize the scenario of oil palm plantations. As Conway and Briner (2005) highlight, whichever emphasized expectations. Rousseau (1995) defined the psychological contract in terms of obligations. This appears to be similar to what Levinson, Price, Munden, Mandl, and Solley (1962) had in mind in their use of expectations that had an obligatory quality which created a sense of duty to be fulfilled. The focus, on obligations brings Rousseau's (1995) definition of the psychological contract very close to Blau's (1964) social exchange theory. The contract between the employers and the workers of oil palm plantations is thus perceived as a social exchange.

Relating the topic to plantations, especially oil palm plantations, the engagement of foreign workers, most of them as temporary workers appear to be an evolving trend. The job is often given to firms or individuals who bring in these temporary laborers to work on the plantation without being the workers of the plantation. These groups of contract

workers are recognized and remain unprotected by labor laws; they migrate frequently at a high risk of being apprehended, in prisons and expatriated. They are also exposed to health risks and have no access to medical care or treatment (National Union of Plantation Workers [NUPW], 2000), compared to remuneration rates in other countries where similar jobs are done such as Indonesia, Thailand, and Philippines. In order to drive down salaries and engage workers that will accept “meager pay for the difficult job” philosophy of the organization, the management has resolved hire more of foreign laborers both via lawful and unlawful means (Navamukundan & Subrahmanian, 2003).

Plantations now apply division of labor approach with each section commissioned out to contractors to remove the cost of constructing and managing the accommodations and infrastructure for workers from the plantation owners. They also avoid paying statutory welfares to laborers because wages are paid in little chunks. All responsibilities relating to labor matters are transferred to the contractor. This is cost effective and simple means of acquiring laborers. The plantation is not obligated to give any employment agreement to the workers; all that is needed is an agreement between the contractors and the plantation owners.

With this system, workers’ rights are easily violated. The following are some of the abuses suffered by contract laborers: payment is in piece rated instead of a whole sum system, there is no specified amount as basic salary; no housing allowances for non-resident contract laborers; no contributions to Workers Provident Fund and Social Security Organization; most contractors do not pay indemnities or other compensations

as specified by the Labor Court or Industrial Court; some contractors even flee workers' wages; the workload often increase to reduce the number of workers to needed to do the job; sometimes contractors use "vouchers" to pay instead of cash, so as to force the workers use the "vouchers" to buy goods from shops with they control; female workers are not registered on the pay-roll to avoiding paying maternity leave allowance; contractors keep workers' passport and other official personal papers as way of forcing workers to remain on the job; contracts are ended and renewed intermittently so that contractors can dodge their responsibilities of paying several statutory benefits as employers to their workers; these workers have no job security; workers productivity is often tampered by contractors to reduce workers' pay; for personal gains and gratifications from contractors some plantation managers prefer the contract system; and workers often get low pay due to the high commissions charged by contractors (Navamukundan & Subrahmanian, 2003).

Contextualizing the topic on oil palm sector, the nature of job invites attention serious violations in the perception of worker safety and security. The oil palm crops needed additional serious 'care' from pests, of which using pesticides turns out to be a main condition. Women are often hired as sprayers of pesticides and fertilizers – an estimated 30,000 women, are working in that capacity in Malaysia, most of them Indians. Since 1991, the Tenaganita organization – or Women's Force – has been working with plantation laborers. The collected data about the work and life of plantation workers and instance of their abuse as women and as workers has made the organization to describe the predicament of those women as "poisoned and silenced", in an article created in

collaboration with Pesticide Action Network (PAN) Asia and the Pacific (the full article made available for this research purpose shows bad care and escapes from the sprays, poor health care and first aid amenities on the plantation, and in some situation the absent of shielding kit). The lack of medical care particularly for women, low supervision and ignorance of the effect of the chemicals and pesticides makes it hard to ascertain the level of impact on their reproductive health and their unborn children. The impacts are very nevertheless (Tenaganita, 2002). Such work environment is almost like poor work climate and there will be low level bond between employer and worker.

The literature above indicates the strained psychological contract prevalent in palm plantations in Malaysia. If responsibilities relating to the psychological contract are breached, workers may suffer a decline in certainty and direction, consequently resulting in job stress for the worker (Shore & Tetrick, 1994). Many literatures in organizational change also propose that eras of extensive environmental change make worker suffer stress (Howard & Frink, 1996; Shaw, Fields, Thacker, & Fisher, 1993). These works therefore say that unsatisfied employers' pledges can be linked to worker's stress.

As it is deliberated above, any breach of psychological contract between workers and employers invites distrust, ill feeling and injustice. It has been pointed out that, there is seldom have any contractual relationship between worker and employer since it the contract is handled by the subcontractors and the mandor's in oil palm sectors. The workers' in the oil palm sectors face many unfair labor practices and exploitation of

human resource, though such evidences are less established through empirical observation.

Table 2.4
Summary of Psychological Contract Literature Review

Psychological Contract	Author	Variable
	Blau, P. (1964)	• Contract • obligations • social exchange
	Levinson, H., Price, C. R.,	• Contract
	Munden, K. J. Mandl, H. J., &	• obligations
	Solley, C. M. (1962)	
	Rousseau, D. M. (1995)	• psychological contract • obligations
	Navamukundan, A., &	• division of labor approach • avoid paying statutory welfares • responsibilities of labor matters are transferred with contractor • workers' rights are easily violated • Unethical work climate
	Subramanian, G. (2003).	
	Shore, L. M., & Tetrick, L. E.	• Unethical work climate • Poor psychological contract • Job stress
	(1994).	

2.2 Underpinning Theories

This fundamental theories followed by the researcher is given below.

2.2.1 Social Exchange theory (SET)

As noted by Lavelle, Rupp, and Brockner (2007), an emerging trend within the social exchange literature is the idea that workers are able to discern the difference between organizational, supervisory, and co-workers influences, therefore directing distinct attitudes and behaviors toward each. In other words, subordinates can simultaneously have separate and simultaneous social exchange relationships with the organization overall (i.e. top management/CEO) and with specific individuals within the organization (e.g., supervisors and coworkers) and therefore have completely different sets attitudes and behaviors directed towards each (Lavelle et al., 2007; Cropanzano & Mitchell, 2005; Masterson, Lewis, Goldman, & Taylor, 2000; Wayne, Shore, & Liden, 1997).

The ethical environment is viewed as “enacted” (e.g setting the extent of wrong doing behavior in an organization), “having observable entities” (e.g., determining codes of ethics, and rules/guidelines for ethical behavior), and “containing attitudes and values that structure, in some consistent fashion, right and wrong behavior” (Menzel, 1995, p.251-252). In other words, an ethical environment can be constructed from the consciousness, attitudes, and cultural context related to right and wrong behaviors. More specifically, the leader’s ethical environment is the most essential element in ever-changing circumstances. The overarching idea of an ethical environment has several components. Ford and Richardson (1994) revealed factors that influence the ethical environment, such as mission and value, leadership and management influence, peer group influence, procedures, rules and codes of ethics, ethics training, and rewards and sanctions.

They argued that these factors are directly related to ethical decision making, and strongly affect the ethical environment and the level of ethical decision making. Such environments are well formulated to influence leaders' decision making, and are associated extensively with workers' ethics through a broadly cognitive ethical context (Sims & Keon, 1997; Trevino et al., 1998). Thus, irrespective of the degree of ethical inference, a more ethical environment encourages leaders to behave according to their organization's interest. Similarly, these circumstances allow leaders to behave opportunistically when organizations encounter certain problems. Organizations make their ethical cultures concrete by diffusing their ethical environments, which ultimately create organizations that are more ethical (Arnold, 2000). However, the mere existence of these norms cannot boost ethical standards. To enhance the ethical environment, leaders must actively communicate with their organizational members. Consistent with previous research, we suggest that ethical behavior by leaders is more common than is opportunistic behavior, and that it is associated with the attributes of the organizational culture, more than it is with the attributes of individual workers (Booth & Schulz, 2004).

The results of unethical work climate leading to unethical work behaviors are crucial to determining whether a given behavior is unethical behavior. Finally, workers' unethical behaviors concerned only with furthering their own self-interest are not considered as unethical work behaviors. Unethical work behavior is grounded in the social exchange theory (Blau, 1964). From this perspective, organizations and their members are involved in economic exchange (e.g., extrinsic benefits as rewards for work) and social exchange (e.g., workers reacting to organizational fairness by engaging in behavior such as

psychological contract). Based on the norms of reciprocity, workers and organizations adjust the balance of their behaviors. When treated fairly by their organization, workers reciprocate with positive attitudes and behaviors; in contrast, when they are treated unfairly, workers engage in negative attitudes and behaviors. On these lines, we posit that when workers experience positive treatment from their organization, they are more willing to engage in better psychological contract.

This research uses Social Exchange Theory (SET) as a lens to compare the impact of workplace relationships on oil palm plantation workers engagement and in turn, their psychological contract, stress and turnover intentions. SET is traditionally used to explain how different workplace exchange relationships benefit multiple stakeholders, arguing that both workers and the organization benefit when relationships are effective. Workers benefit because effective relationships lead to the exchange of resources, knowledge, time and emotional support required to undertake oil palm plantation work effectively (Wang H., Law, Wang, & Chen, 2005; Yukl & Michel, 2006). Using SET in the ideal context, workers would have access to support from the plantation, their supervisor and colleagues and consequently, would be enthused and engaged in oil palm plantation. Additionally, because engaged workers are energetic in the job, they are also likely to have high perceptions of wellbeing and be committed to oil palm plantation work, reducing their intentions to leave. The current research relates the ethical work climate and the psychological contract in relation to the social exchange happen between the workers and plantation management especially in oil palm plantation in the Sabah region of Malaysia.

2.2.2 Job Demand and Resource Theory (JDR) and Job Stress

In the previous three decades, several researches have revealed that job characteristics have a significant effect on workers welfare (e.g. job strain, burnout, work engagement). One major weakness of past models within the domain of occupational health research is tailored towards an injury which is as a result of stability of trouble among the requirements workers are exposed to the resources available to them. The Job Demands-Resources (JD-R) model is a broad effort that tends to describe the workers' welfare and their ill-health workers concurrently, and the associated precursors and effects (Schaufeli & Bakker, 2004). Theoretically speaking, the JD-R model assumes two processes: (1) an energetic process of overburden and draining in which high job demands wear out or drain the workers' energy backup; (2) a motivational process that a lack of resources prevents efficient handling of high job demands and promotion of mental pull out or stress.

Contextualizing the topic to oil palm plantations the demands and the resources are linked to their day-to-day plantation operations. The demand generated by the work is related to the task, tools and the work environment. The workers have to perform the task with the outdated tools and resources in an unethical work climate in oil palm plantations. There is resource and task requirement capability mismatch, in an unethical work climate, leading to poor level of psychological contract between workers and plantation management.

work stress: Job inadequacy and duty function for others. Job inadequacy implies disparity between workload and the ability of the worker such as knowledge and skills. Duty function for others implies the level to which workers are accountable for the protection and functioning of other colleagues in the organization. Such factors are very closely knit with the plantation company policies and procedures. How far is the plantation company policy then develops satisfaction among the workers that determine a better work environment leading better psychological contract between workers and employers in the oil palm plantations. All such factors especially that originate from the nature of the job and the environment, develop job stress have proved to induce sensitivities of pressure on workers physical and emotional level and affect the work fulfillment and work perseverance of workers.

Job resources is described as physical, psychological, social, or organizational features of the task which is either/or (1) decrease task requirements and the related physiological and psychological costs; (2) are useful and efficient to realize task objectives; (3) encourage individual progress, knowledge and growth. Therefore, resources are essential to handle task demands and to 'get things done,' even also very crucial within their own right (Hobfoll, 2002). For this particular study, we included job resources at the task level and tool and environment (ergonomics factors), the interpersonal-level (support from colleagues), and the organizational level (supervisory coaching).

In the case of a popular Demand-Control Model (DCM) Karasek (1979, 1998), job strain is specifically triggered by the joint influence of high job demands (specifically task

overwork and time pressure) and poor task organization– “the working individual’s potential control over his tasks and his conduct during the working day” (Karasek, 1979, p. 289-290). For example, study has shown that job demands result to sleeping trouble which also damage wellbeing (Doi, 2005; Halbesleben & Buckley, 2004), while on the other hand, job resources in the form of social support, performance feedback among others bring about a motivational process that metamorphose into job-related learning and organizational commitment (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Salanova, Agut, & Peiro, 2005; Taris & Feij, 2004).

Even though past research above have abundant list of potential precursors of worker welfare, theoretical advancement is still scarce. It is evident that most research has utilized a laundry-list technique to examine the well-being of the workers with reliance some job stress frameworks like that of demand-control and effort-reward imbalance by Karasek (1979) and Siegrist (1996) respectively.

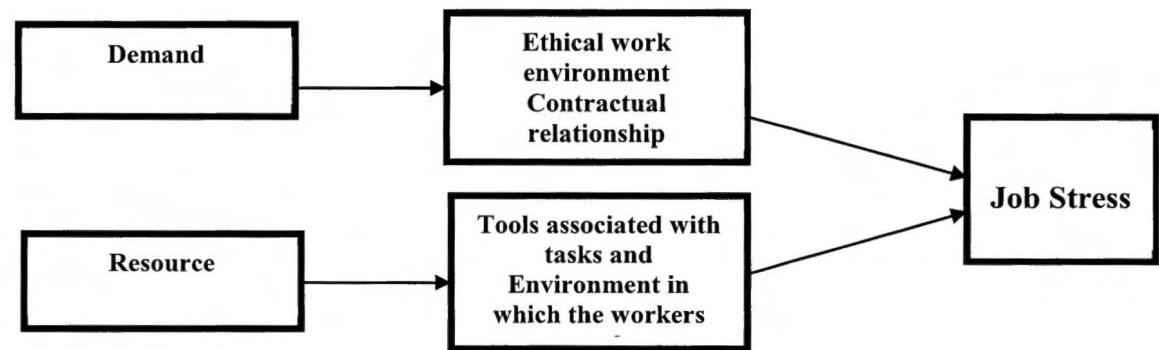


Figure 2.1
Model based on JDR (Job Demand-Resource)-Job stress

The early JD-R model proposed two processes for the development of burnout. First is the long-term excessive job demands from which workers do not adequately recover may lead to sustaining activation and overtaxing, eventually resulting in exhaustion – the energy component of burnout. Second, a lack of resources precludes that job demands are met and that work goals are reached, which leads to withdrawal behavior. Indeed, withdrawal – or reduced motivation/disengagement, i.e., the motivational component of burnout – acts as a self-protective strategy to prevent further energy depletion.

Crawford, LePine, and Rich (2010) as well as Van den Broeck, De Cuyper, De Witte, and Vansteenkiste (2010) differentiated two categories of job demands: job challenges and job hindrances. Job challenges represent demands that do deplete limited resources but, nevertheless, offer the opportunity to secure more rewards and gains. This prospect of gains partly replenishes mental energy, curbing the deleterious effect of these demanding tasks. A heavy workload, for example, might enhance skills and ultimately increase the likelihood of promotion and the achievement of other needs. In contrast, job hindrances deplete resources without attracting additional gains. They obstruct other needs and thus evoke negative emotions. Examples might include role ambiguity, job insecurity, and interpersonal conflict. These job hindrances are more likely than job challenges to undermine the vigor and perhaps elicit exhaustion, manifesting as burnout rather than engagement.

2.2.3 Job Demand and Resource (JDR) and Intention to leave

Conceptually, absenteeism and turnover are actions that have drawn great consideration among researchers (Harrison & Martocchio, 1998). The two concepts (turnover and absence) can be called withdrawal behaviors, since both require withdrawing from job (Bordia & Norman, 1997). The reasons for these two actions are interconnected. Both actions can be traced to the same fundamental motivation of getting away from a displeasing job (Mitra, Jenkins, & Gupta, 1992).

Several assumptions posit that people who do not like their job tend to get out of the job completely or just for the main time by absenting from work or through late coming. These kinds of withdrawal actions have drawn huge consideration from this domain of research; however, it requires further attention particularly in a broader view.

Majority of the assumptions on turnover regard it as the outcome of the workers displeasure. Those who do not like their work tend to look for another job. Frameworks for turnover equally stressed on multiplex growth where job satisfaction originally associated with turnover intentions. That is, where job satisfaction is adequately poor, there is tendency that the workers could come up with behavioral intention of leaving their job (Appelbaum & Gandell, 2003; Freund, 2005; Yieth Chen, Long Chang, & WenYeh, 2004). Therefore, there is the possibility that the intention could result to job searching events (Mano-Negrin & Tzafrir, 2004), which if successful, would lead to turnover (Spector, 1997).

The scope of previous investigations by studying the effect of job attributes on turnover intentions. Conventionally, examination of intentional work turnover center specifically on job attributes, such as job value (Hayward et al., 1989; Hayward, Friedman, & Chen, 1998). Pay or salary is the main objective of the workers to work. There is always a positive relationship between pay and job performance which also affects job and organizational behavior. The perceived equality or fairness of one's pay can be a more important issue than the actual amount. Dissatisfaction with pay could be another reason to decrease in the plantation yearly production and job performance.

The JD-R model (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) starts from a prolonged practice in job and workplace psychology, that is, the investigation of job attributes. The model explains prior work attribute by explaining the link between several strength- draining work attributes (i.e. job demands) and inspiring work attributes (i.e. job resources) conversely, workers " impaired (i.e. burnout) and best work-associated welfare (i.e. work engagement). In addition, there are many studies connecting work fulfillment, establishment or work pledge to turnover (intentions), resignation (intentions) or truancy (Falkenburg & Schuyns, 2007; Griffeth, Hom, & Gaertner, 2000; Hom, Caranikar-walkr, Prussia & Griffeth, 1992; Mobley, 1977; Mobley et al., 1978; Mobley, Griffeth, & Meglino, 1979; Podsakoff, J. LePine, & M. LePine, 2007).

The Job Demands–Resources (JD-R) model is an instance of such a stable methodology which aims at explaining adverse (burnout) as well as affirmative (work engagement)

sides of worker benefits by relating it to a strain and inspirational procedure separately (Bakker & Demerouti, 2007). In the prevalent identified organizational model, Maslach, Jackson, and Leiter (1986, p. 36–37) suggested that the authenticity of reported or actual conditions (i.e. work overload and personal conflicts) and the abnormality of the unreported means (i.e. control coping, social support, autonomy, and decision involvement) indicates burnout, and it is assumed to be a manifestation of many adverse results in the nature of bodily sickness, turnover, truancy, and reduced organizational obligation.

Major factor identified by the experts is related to the task in which plantations workers engage in. Major activities in which the workers are exposed in the oil palm plantation involve upstream oil palm plantation work, midstream process and downstream application. The cycle of oil palm plantation starts with seeds and management of seedlings follow by that clearing of soil work activities such as terracing, conditioning, irrigation, winding and containers of cover crops follow by that pesticide and herbicides spraying, fertilizer application and pruning are carried out until the oil palm fruit ready for averting followed by these activities harvested fruits have to be sent to the oil palm mill by truck. All these activities are routine base and there is no change so far in relation to the nature of the job, involves high levels of body stretching, leaning, bending, flecion of the trunk, muscle pull, due to forceful action and rapid work best. Body areas potentially affected include lower back, upper back, hands and arms due to the nature of the job or task requirements. In addition to that, such task related activity is causing issue locomotors disorders of muscle, nerve tenderness, joints, and cartilage, or the upper and

lower limbs, neck and lower back, MSD or work related. MSD leads to high multitude of ergonomics risk factors. Especially the people engaged in loading and unloading activities are exposed to continue problem related to pain in the hands, arms, shoulders, neck, back, and waist leading to high job demand related issues. Thus, entire work activities in oil palm plantation are a susceptible physical and psychological contract issues, between worker and the policy management in oil palm plantations.

The crucial idea of the JD-R model is that, regardless of the job concerned, work requests may induce a pressure or health injury development, while work incomes stimulate an inspirational course (Bakker & Demerouti, 2007; Schaufeli & Bakker, 2004a). The pressure procedure is explained by Hockey's (1993, 1997) compensatory regulatory-control model. Maslow stressed emotional as well as physical safety in times of economic hardship, when jobs are scarce; most workers are so intent on survival that they cannot attend to higher needs. The framework illustrates that the individual going through stress is likely to swap it with his safety objectives result and the intellectual attempts which is spent for the purpose of attaining the objectives (costs). When job demands improve, regulatory hindrance take place in such that compensatory attempt would have to be mustered to resolve the improve demands at the same time keeping the performance levels high. The additional compensatory effort is associated with physiological and psychological costs in the form of improved sympathetic event, fatigue, and irritability. Constant gathering of compensatory effort exhausts the workers' strength which could result in burnout, ill-health, (Hockey, 1997; Ursin, Murison, & Knardahl, 1983), and consequently absenteeism.

Several studies (Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003; Schaufeli & Bakker, 2004) have affirmed the dual pathways to worker welfare as posited by JD-R theory, and demonstrated that it determines vital organizational performance. Bakker et al. (2003b) findings on many structural equation modeling (SEM) analyses mostly corroborate the dual processes in organizational performance. At first energy-driven advancement, task requirements (i.e., work pressure, computer problems, emotional demands, and changes in tasks) are seen as vital predictors of health problems which are correlated with no illness (time and lasting nonexistence). Right from the next motivation-driven advancement, job resources (i.e., social support, supervisory coaching, performance feedback, and time control) determined dedication and organizational commitment, and were consequently linked with turnover intentions.

2.3 Literature gap

After reviewing various literatures that guide this study on determinants of job stress and intention to leave among workers in the oil palm plantations, four main gaps were clearly identified. These gaps are pertaining to the sector oil palm plantations and especially in the foreign workers, contextualizing the topic to oil palm plantations. As we aware fewer studies are conducted with the support of measurements from quantitative research.

Firstly, quite a few studies have conducted to identify the relationship between working conditions and workers intention to leave from organizations in the oil palm plantation. These studies are from larger and medium scale manufacturing units across the globe linking turn over intention or workers attrition the manufacturing establishments (C.B.

Mamoria & S. Mamoria, 1980; Chapman & Meyers, 2001; Ashford, Lee, & Bobko, 1989; Ansari, Shende, Sheikh, & Vaidya, 2013; Van Dijk & Swaen, 2003; Kragelj, Pahor, & Billban, 2005; Bosma, Stansfeld, & Marmot, 1998). So far no studies with the support of quantitative research have conducted on the perception of foreign workers in the oil palm plantations. The oil palm plantations in the Sabah region of Malaysia are occupied with more foreign workers than local workers due to the unique factors pertinent to that region. The studies reported so far from oil palm plantations is explained with the support of qualitative research methods (Vosko, 2010; ILO, 2004; United States Department of Labor, 2012; Azizah; 2009; Gellerstedt, 1993; Amnesty International, 2010; MPOB, 2012; MTUC, 1989; Walker-bone & Palmer 2002; Saravanamuttu, 2012; Tirtrosudarmo, 2013; Verite, 2012) to explicate the relationship. This definitely created an opportunity for the researcher to further explore the untapped area of working and living condition issues in order to establish decent working and living conditions in oil palm plantations with the support of tools from quantitative research.

Secondly, despite the abundance of knowledge in the management literature and various empirical evidence regarding the impact of ethical work climate on stress and intention to leave, (Hart & Cooper, 2001; Kahn & Byosiore, 1992; Ambrose et al., 2008; Sims & Kroeck, 1994; Sims & Keon, 1997; Tepper, 2000; De Boer, Bakker, Syroit, & Schaufeli, 2002; Elovainio, Kivimaki, & Helkama, 2001), very less studies have come out from the oil palm sector. Ethical violations are crucial issues researched and reported by the investigators from qualitative research (The Jakarta Post, 2008; Amnesty International, 2012; MPOB, 2012; MTUC, 1989; Walker-bone & Palmer 2002; Saravanamuttu, (2012);

Tirtrosudarmo, 2013; Verite, 2012), though seldom any observations available through appropriate tools and measurement models from quantitative research. To facilitate this research, the components of ethical work climate will be clearly studied to show how this variable is linked to job stress and intention to leave among workers in the oil palm plantation sector in general and especially in relation to foreign workers.

Also realizing that most psychological contract studies (Conway & Briner, 2005; Rousseau, 1995; Guest, 2007; Homans, 1961; Blau, 1964; Gouldner, 1960) did their researches specifically connecting the concept to manufacturing and service sector industries and which are in general on casual workers with the support of quantitative research. Nevertheless, some studies related to psychological contract has come out with qualitative research in the oil palm plantations (National Union of Plantation Workers, [NUPW] 2000; Amnesty international report 2012; Navamukundan & Subrahmanian, 2003; The Jakarta Post, 2008; Down to Earth, 2007; Tenaganita, 2002). This study fills the gap by choosing the oil palm sector, which is abundantly recruited foreign workers, legally as well as illegally in order to operate their oil palm operations, unique to the Malaysian oil palm sector business context. The study provides a better understanding on the psychological contract issues which are critical in oil palm plantation activities smooth operations.

Finally with the support of literature review, though it is established a strong relationship between physical working conditions on individual workers, (Tett & Meyer, 1993). Ongori, 2007; Falkenburg & Schuyns, 2007; Griffeth, Hom, & Gaertner, 2000; Hom et

al., 1992; Mobley, 1977; Mobley et al., 1978; Mobley et al., 1979; Podsakoff, J. LePine, & M. LePine, 2007; Ng et al., 2013; Fathallah, 2010 seldom any study has conducted to explore its relationship between job stress and workers intention to leave from oil palm plantations, focusing on the foreign workers. Turnover intention is a topic widely discussed, though it is seldom measured or deliberated in relation with the oil palm sector in general and relating the labor shortage in specific. In short this research is carried out with the aims to fill the research and literature gap and sought to make a significant contribution to the body of literature.

2.4 Summary

This particular chapter included the literature recently cited on the determinants of job stress and intention to leave among foreign workers. The chapter content has segregated in four titles based on the independent and dependent variable selected for the study. The concepts are described initially, followed by that the theoretical fundamentals are presented with the establishment of the relationship between dependent and independent variables, with sub factors considered. The chapter integrated the general literature related to the concept undertaken for the study and then it with the oil palm sector, in specific. In the past, this research area was more explored with the support of qualitative research interventions, which were apparently descriptive in nature.

Nevertheless, this chapter gathered adequate literature in order to explain the relationship between an independent and dependent variable selected for the study. The next chapter elaborates on the approach, design, theoretical framework, hypothesis, and measurements followed by the study.

CHAPTER THREE

METHODOLOGY

3.0 Overview

Chapter one and two has provided an initial understanding of the concepts explained in relation to the topic selected for the study. This chapter provides details of the research methodology, its purpose and how it was designed and implemented. It presents a detailed description of the research design, hypothesized research framework, research hypothesis, and the measurement of constructs, operational definition and measurement of variables. Chapter 3 further describes the questionnaire design and data collection methods including the survey techniques, the data analysis methods and PLS-Structural Equation Modeling (SEM) techniques that are incorporated into the thesis.

3.1 Research Design

This particular study follows quantitative research design by gathering primary data, in order to answer the research questions posed in this research and further to achieve the research objective generated. Quantitative research is essentially about collecting numerical data to explain a particular phenomenon, particular questions seem immediately suited to be answered using quantitative methods. Quantitative research uses a number of methods to gather, interpret, and report what these numbers mean, but these methods are usually very systematic in order to maintain the consistency of these numbers across different contexts (Cooper & Schindler, 2006).

The selection of quantitative research design is based on the observations that it support in stating the research problem in very specific and set terms (Frankfort-Nachmias & D. Nachmias, 1992); precisely specifying both the independent and the dependent variables under investigation; following firmly the original set of research goals, arriving at more objective conclusions, testing hypothesis, determining the issues of causality; achieving high levels of reliability of gathered data due to controlled observations, laboratory experiments, mass surveys, or other forms of research manipulations (Balsley, 1970); eliminating or minimizing subjectivity of judgment (Kealey & Protheroe, 1996); and allowing for longitudinal measures of subsequent performance of research subjects.

Moreover, empirical research design has higher degrees of external validity, meaning that the results can be generalized or extended to other situations and attempts are made to establish cause-and-effect relationships through certain types of correlation or regression analyses (Sekaran & Bougie, 2010). The data were analyzed using structural equation modeling approach. Thus, the present study is a quantitative research design, since the primary data were collected through empirical study using structured questionnaire design. It is most suitable and appropriate to use structural equation modeling (SEM) as the main method of analysis (Hair, Black, Babin, & Anderson, 2010).

3.2 Research Philosophy

In conducting a research, research philosophy is adhered to in order to systematically guide researchers and create understanding about the designs implemented in research. The research philosophy adopted by a researcher is made up of important assumptions

about the way the researcher views the world (Saunders, Lewis, & Thornhill, 2007). According to Creswell (2008), researchers make philosophical claims about what constitute knowledge (ontology), how they gain the knowledge (epistemology), and the type of values that constitutes the perception of such knowledge (axiological), how the knowledge is written (rhetoric) and method through which such knowledge is studied (methodology).

In the study of the determinants of job stress and workers intention to leave, an objectivity ontological principle is adhered to by majority of the scholars (Ellen, Mohr, & Webb, 2000; Bhattacharya, Hull, & Su, 2009; Groza, Pronschinske, & Walker, 2011; Becker-Olsen, Cudmore, & Hill, 2005). While ontology is concerned about the nature of being, epistemology focuses on the sources of knowledge about reality (Blaikie, 1993). In line with extant research in the study of determinants of job stress and workers intention to leave, this study is adhering to the positivist epistemological principle. The observation of reality in this study is systematic (using statistical analysis). Axiology is a philosophical principle that is concerned about value judgements (Saunders et al., 2007). It is concerned about the role of the researchers' values in the scientific process (Ponterotto, 2005). In this thesis, the research is free from the values of the researcher. This is based on the fact that the value consideration in this research is based on the nature of the perceived value of the respondents, which are external to the value manipulation of the researcher.

3.3 Research framework

The research frameworks, according to Smyth (2004) are structured from a set of broad ideas and theories that helps a researcher to properly identify the problem they are looking at the frame their questions and find suitable literature. A research framework of a research project relates to the physical basis on which the research takes place and forms the links between the research aspects and practical components of the investigation undertaken. Research framework therefore, has implications for every decision made in the research process (Mertens, 1998). Most academic researcher’s use a research framework at the outset because it helps the researcher to clarify her research question and aims.

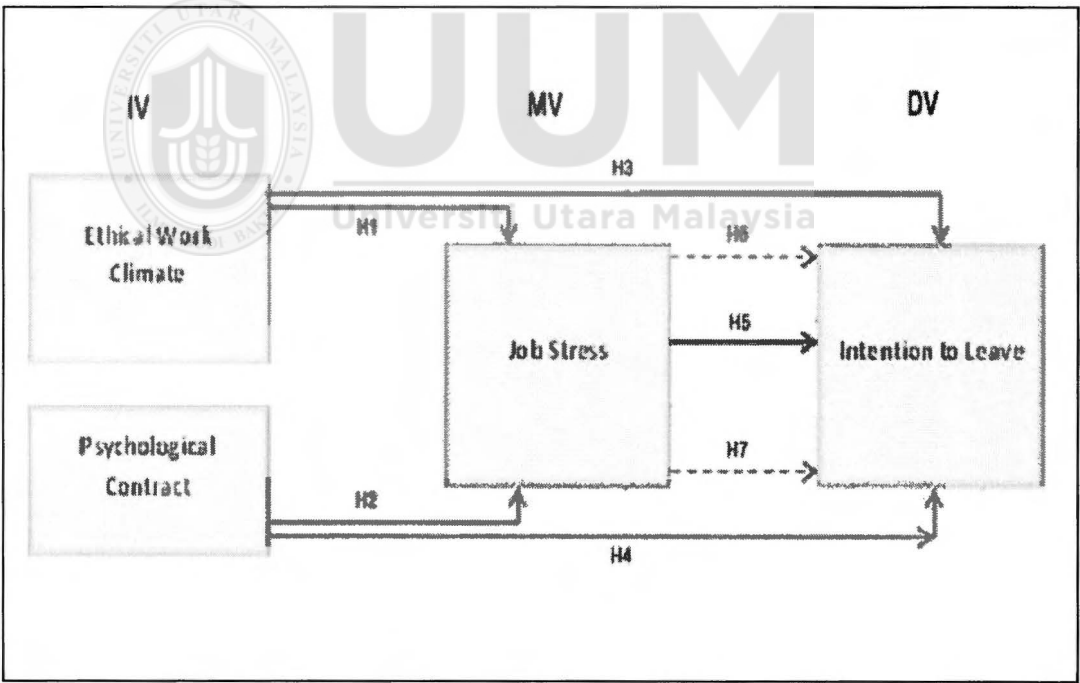


Figure 3.1
Research Framework Model

This research framework consists of concepts, together with their definitions and existing theory/theories that are used for the study. The framework demonstrates an understanding of theories and concepts that are relevant to the topic of the research and that will relate it to the broader fields of knowledge one will be undertaking. This particular study concentrates on the effect of ethical work climate and the psychological contract on job stress and worker's intention to leave the oil palm plantations. Each factor selected for the study has been conceptually, operationally and theoretically connected through the framework to explore and explain the phenomena under study (Cresswell, 2007).

This particular study developed a model which is based on the Social Exchange Theory and the Job Demand and Resource theory in order to explain the assumptions circled around job stress and workers intention of leaving. It is hypothesized that workers initially face the difficulties in relation to the demand generated by the work environment, leading to job stress and this scenario further develops an intention to leave the oil palm work among the workers. It is hypothesized that the two determinants ethical work climate and psychological contract is having the direct relationship with the job stress as well as intention to leave among the workers. These assumptions are supported by the Social Exchange Theory and Job Demand Theory. Based on this assumption it is hypothesized that the nature of work which is demanding and taxing to the workers with bare minimum resources generates the job stress and further lead to workers intention to leave the oil palm plantations. Henceforth, in order to get the fundamental base for the theoretical model formulated, this study follows Job Demand and Resource theory, with the formulation of another five hypothesis. Last but not least, the model also hypothesis

that there will be variation among the worker's intention to leave, if job stress act as a mediator between ethical work climate and psychological contract on the dependent variable.

The research framework discusses the interrelationship and path analysis, among the two-predictor variables (ethical work climate and psychological contract) and a mediator (job stress) that were considered important to cause job stress and workers intention to leave the oil palm plantations.

3.4 Hypothetical Development

3.4.1 Ethical Work Climate and Job Stress

An ethical climate represents those shared perceptions of organizational practices (Olson, 1998). Levy and Dubinsky (1983) state that when workers come across with ethical challenges, the level of their work related stress might increase. Although the researchers (Jaramillo, Mulki, & Solomon, 2006) did not find a direct impact of ethical climate on work related stress in their studies, their findings showed that ethical climate had a significant positive impact on experienced meaningfulness, which leads to lower stress. In organization sector where still traditional, even feudal labor relations often persist and agricultural workers are often denied basic labor rights. Generally, agricultural workers do not have labor standards equivalent to workers in industry and commerce. General labor legislation often excludes the agricultural sector, may not be fully applicable, or applied, or be out of date. The nature of employment of some workers excludes them from protection – casual or seasonal workers, migrant workers, or indigenous peoples (ILO, 2012).

The ILO (2010) recognizes that forestry work, including work on industrial tree plantations and oil palm plantations is strenuous and dangerous. Oil palm plantations have particularly high potential for exploitation due to the isolation of palm oil plantations (World Bank, 2010). Many of the workers are victims of serious labor exploitation. Several factors are leading to job stress may correlated to relate to the nature of work. Improving the ethical climate may be essential for addressing ethics stress, job satisfaction, and turnover intentions (McDaniel, 1997; Raines, 2000; Shirey, 2005), yet few studies have examined the perception or importance of ethical climate on plantation jobs. The ethical work climate is the variable in correlation with the Job Demand and Resources Theory, which exhibit group attitude towards the job stress. Derived from the preceding literature review, the following hypothesis is presented.

H1: There is direct relationship between ethical work climate and job stress among foreign workers in the oil palm plantations.

3.4.2 Psychological Contract and Job Stress

The psychological contract is an increasingly relevant aspect of workplace relationships. It constitutes a series of unrecorded anticipations that exist between workers and their employers (Armstrong, 2009). As it is indicated by Amnesty international (2010) there are several human rights violations in the form of exploitative labor practices are happening in the oil palm plantations, which may well connected to psychological contract between workers and employers. The report on Malaysia oil palm workers (Jakarta post, 2008) further indicate that these migrants workers are under precarious job

conditions and are susceptible to labor exploitation by non-renewal of work permit, nonpayment of wages, work without safety equipment's, lack of medical facilities, verbal and physical abuses of supervisors, poor accommodation facilities and especially the vulnerable state of woman as well as men. Workers are completely at the whim of plantation owners or managers, whose priority it is to maximize productivity, often at the expense of reasonable working and living conditions and the rights of plantation workers.

Despite many of the early organizational fairness studies overlooking the impact of injustice on job stress, there is a rapidly growing body of research focusing on the “injustice as stressor” concept. Not only has this research identified close relationships between perceptions of injustice and indicators of psychological strain, but the findings strongly suggests that the effects associated with fairness perceptions are independent of other job stressors (Kivimaki, Elovainio, Vahtera, Virtanen, & Siegrist, 2007). It is found that procedural and relational justice were independent predictors of a range of stress-related outcomes including self-rated health (Kivimaki et al., 2007) and coronary heart disease risk scores (Kivimaki, Ferrie, Brunner, Head, Shipley, Vahtera, & Marmot, 2005).

Stress is the manifestation of all such work environment, which provides little contentment to the workers. Considering the far-reaching consequences of the psychological contract and the job stress the following hypotheses is presented in relation to oil palm plantations.

H2: There is direct relationship between psychological contract and job stress among foreign workers in the oil palm plantations.

3.4.3 Ethical work climate and Intention to leave

Research indicates that the work environment plays a critical role in influencing individual and organization (Ohly & Fritz, 2010). Ohly and Fritz (2010) state that an organizational climate could promote or deter work-based outcomes. Work environment is associated with turnover intention (Russel, Williams, & Gleason-Gomez, 2010). A good work environment is associated with worker satisfaction, worker performance, organizational commitment and a decrease in intent to leave (Donoghue, 2010). A good climate facilitates good working relationships between management and workers (Pyman, Holland, Teicher, & Cooper, 2010). Verité research (2012) revealed that in oil palm plantations, in particular, workers can face significant vulnerability, patterns of abuse and malpractice, and coercion at various stages of the recruitment, migration and employment process. They work long hours for extremely low wages and do physically demanding jobs that leave them susceptible to workplace injuries and poor general health. Intention to leave is associated with negative work factors such as organizational climate and perceptions of job insecurity (Emberland & Rundmo, 2010; Mishra & Bhatnagar, 2010).

Previous research indicates that there is a relationship between intention to quit and actual quitting (Emberland & Rundmo, 2010). Turnover intentions can result from push factors like lack of interest in the job, bad working climate and pull factors like availability of opportunities in the market (Hughes, Avey, & Nixon, 2010). The ethical work climate is the variable in correlation with the Job Demand and Resource Theory. Relatively little is known about the ethical work climate prevalent in the oil palm plantation, except some qualitative data and in what way such practices of injustice and

violations of human rights affect the job stress of foreign workers. Therefore this particular study poses the below mentioned hypothesis.

H3: There is direct relationship between ethical work climate and intention to leave among foreign workers in the oil palm plantations.

3.4.4 Psychological contract and Intention to leave

The breach of worker's psychological contract is also positively related to the worker's intention to leave the organization, which is another widely researched attitudinal job outcome (Hess & Jepsen, 2009). After a psychological contract breach, workers may be less willing to exert extra effort on behalf of the organization and have a lower desire to remain workers of their organization (De Hauw & De Vos, 2010). Several breach of contract observations are reported by Verite (2012, 2014) which include, passports and other legal documentation are either not provided, or are withheld, restricting workers' freedom of movement, work is hard, hours are long, and pay is low (RM 600 or 200 USD/month), children and young workers are employed on plantations; protective restrictions are not implemented. Women are not treated equally as men; in most cases, they are not considered as workers, do not receive payment directly, even if they spend long hours of work in the plantations alongside their husbands, in most cases, the harvesting practices remain physically-challenging, employers do not want to invest in mechanizing tools, living conditions can be harsh and even primitive, with very limited contact with the world outside the plantation, basic amenities like water and food are not readily available and in some plantations, there is a monopoly on supplies and workers

have no choice but to pay exorbitantly priced basic goods. Research has found that psychological contract breach was significantly and positively related to intention to turnover (Suazo, 2009; Zhao, Wayne, Glibkowski, & Bravo, 2007). Worker's view of Job Demand and Resource Theory is regarded as a steady condition in work interactions and has adverse results for both workers and employers. Derived from the preceding literature review, the following hypothesis are presented.

H4: There is direct relationship between psychological contract and intention to leave among foreign workers in the oil palm plantations.

3.4.5 Job Stress and Intention to Leave

Focusing on the causes of worker intentions to stay or leave has been one of the recent research approaches in organizational turnover literature (Guinmaraes & Owen, 1997). Although, there is no standard framework for understanding the workers turnover process as whole, a wide range of factors have been found useful in interpreting worker turnover (Ongori, 2007). Stress among workers and their turnover intention have always been important for plantation managers in general, since the oil palm plantations are facing acute shortage of laborers. Firth, Mellor, Moore, and Loquet (2007) identified that the experience of job related stress and the range factors that lead to job related stress (stressors) makes workers to quit the organization. An unstable, unsecured work environment that includes job security, continuity, procedural justice deviates the workers satisfaction level, increase stress at work and as a result increase their turnover intention. Lack of job security and status dissimilarity among workers and the same level also

causes stress which may lead their intention to leave the organization (Alexandros-Stamatios, Matilyn, & Cary, 2003). Role stressors also lead to workers' turnover. This causes uncertainty about what their role should be. It can be the result of misunderstanding what is expected, how to meet the expectations, or the worker thinking the job should be different (Kevin, Joan, & Adrian, 2004). The past literature indicates that the oil palm sector is such that there is poor working and living conditions and there are a lot of uncertainties associated with the nature of work in which set of interactions or exchange of perception about the work, demand and difficulties between worker and employer. Though some studies have come out yet few studies have examined the perception or importance of ethical climate in relation to job stress among plantation workers. In order to clarify this relationship the study followed social exchange theory (Blau, 1964). It is assumed that the stressful social interaction leading to job stress among workers in the oil palm plantations. Derived from the preceding literature review, the following hypothesis is presented.

H5: There is direct relationship between job stress and intention to leave among foreign workers in the oil palm plantations.

3.4.6 Mediating effect of job stress on ethical work climate intention to leave relationship

Research has found a significant negative correlation between ethical work climate and turnover intentions (Jaramillo et al., 2006; Mulki, Jaramillo, & Locander, 2008; Schwepker, 2001; Stewart, Helenius, Toyoda, Ramanathan, Muller, & Hyman, 2011) or

turnover (DeConinck, 2011) with various groups of workers. Most studies have either included only turnover intentions (Fournier, Tanner, Chonko, & Manolis, 2010; Stewart et al., 2011) or reported that the relationship between ethical work climate and turnover is mediated by other variables (DeConinck, 2010). It is widely observed in the past literature qualitative research that the oil palm plantations sector, especially in Malaysia, is infamous for violation of human rights and ensuring poor working and living conditions of the workers residing in remote locations of oil palm plantations. Ethical Work Climate is important because it influences workers' behavior (Wimbush & Shepard, 1994). Ethical Work Climate has been shown to reduce deviant workplace behavior (Peterson, 2002; Wimbush, Shepard, & Markham, 1997) and worker's intention leave from work. Consistent with Social Exchange Theory it is argued that the ethical climate is part of the organizational inputs into the social exchange to which workers respond in the form of job stress and burnout. Thus, in this study Ethical Work Climate is proposed to be related indirectly to turnover through job stress and turnover intentions. In view of these findings, this particular study has formulated the following hypothesis.

H6: Job stress mediates the relationship between ethical work climate and intention to leave among foreign workers in oil palm plantations.

3.4.7 Mediating effect of job stress on psychological contract on intention to leave

After facing a negative experience at the workplace (a psychological contract breach), workers may evaluate the situation and questions whether to remain in the employment relationship (Turnley & Feldman, 2000). Research on worker turnover has found that

The list of hypotheses developed for this study was formulated based on the research framework and presented in table 3.1. As a result, the following hypotheses are;

Table 3.1 *List of Hypotheses*

Hypothesis	Description
H1	There is direct relationship between ethical work climate and job stress among foreign workers in oil palm plantations.
H2	There is direct relationship between psychological contract and job stress among foreign workers in oil palm plantations.
H3	There is direct relationship between ethical work climate and intention to leave among foreign workers in oil palm plantations.
H4	There is direct relationship between psychological contract and intention to leave among foreign workers in oil palm plantations.
H5	There is direct relationship between job stress and intention to leave among foreign workers in oil palm plantations
H6	Job stress mediates the relationship between ethical work climate and intention to leave among foreign workers in oil palm plantations.
H7	Job stress mediates the relationship between psychological contract and intention to leave among foreign workers in oil palm plantations

3.5 Operational Definition

Most of the measurements that have been utilized in this current study were adapted from past-established instruments. While some instruments are developed, contextualising the topic to oil palm plantations. All measurement items (47 items) coming from each construct and its Cronbach alpha level are summarized in the table 3.2. All measures achieved Cronbach alpha level beyond the recommended level of 0.60 passing the minimum requirement (Nunnally, 1960).

Table 3.2 Measurements of constructs

	Instruments	No of Items	Scale (Likert)	Reliability	Authors
1	Intention to leave	3	5 point scale	0.90	Mobley, Horner & Hollingsworth (1978)
2	Job stress	32	5 point scale	0.91	Shailendra Singh (1989)
3	Ethical work climate	7	7 point scale	0.89	Schweperker (2001).
4	Psychological contract	5	5 point scale	0.89	Robinson and Morrison (2000)

3.5.1 Measurement on Intention to leave Instrument (ILI)

Worker's turnover intention will be assessing by three-item measure. This measure was based on Mobley, Horner and Hollingsworth theory (1978). The items were: (1) I think a lot about leaving the organization, (2) I am actively searching for an alternative to the organization, and (3) As soon as it is possible, I will leave the organization. Response ranged by 5-point Likert Scaling from 1= "Strongly disagree" to 5= "Strongly agree". Higher score indicated higher intention to quit from a job. The internal consistency coefficients for intention to quit from the organization were 0.90. The details are given below in the table (table 3.3).

Table 3.3 *Intention to leave Items in the questionnaire*

Code	Items
IL1	I think a lot about leaving the organization.
IL2	I am actively searching for an alternative to the plantation.
IL3	As soon as it is possible, I will leave the organization.

3.5.2 Measurement on Job Stress (JS)

In order to measure the job stress among the workers in the oil palm plantations, this particular study considered the instrument which was developed by Singh (1989) to measure organizational stress. The job stress questionnaire has 10 sub variables. These job stress dimensions are measured by the workers' response to the job factors as prescribed by them (Singh, 1990). It consists of 33 questions about job stress. One question on lack of group cohesiveness was excluded after pre- testing due to slight

duplication with another question and has a total of 32 questions. In order to get maximum response both positively and negatively, keyed items were included in which each statement is rated on a 5-point scale. This test can be administered individually or in groups.

The test measures ten dimensions of stress; which include; Lack of group cohesiveness: A situation of stress where people do not stick together on group decisions and do not go along well; Role conflict: A situation of stress where contradictory demands are put on the role incumbent; Feeling of inequality: A situation of stress where the incumbent feels that compensation provided to him is not justified; Role ambiguity: A situation of stress where the incumbent is not clear about the requirement of the job; Overwork function: is a stress condition that the person concerned feels that he/she is mandated to carry out more than required for the time and resources allocated; Lack of supervisory support: A situation of stress where the incumbent perceives the role of leadership as passive and discouraging at a time when he/she needs help and encouragement in tackling the problems; Constraints of change and rules/regulations: A situation of stress where the incumbent experiences difficulties in an attempt to get along with changes and also strict laws/directives; Job difficulty: A situation of stress where the incumbent feels that the job is taxing his/her abilities and is significantly different from the requirement of the job; Job requirement/Capability mismatch: A situation of stress where the incumbent feels that his/her abilities are significantly different from the requirement of the job; and Inadequacy of role authority: A situation of stress where the incumbent perceives that

he/she is not provided with an adequate amount of authority to discharge his responsibilities.

Table 3.4 *Job stress Items in the questionnaire*

Code	Items
JS1	I can predict what others expect of me.
JS2	I am clear of what others expect of me
JS3	On my job whenever the situation arises, there are established procedures for handling it.
JS4	I get enough facts and information to do my work well
JS5	I don't get enough time to finish my assignments
JS6	Politics and regulations generally limit the alternative solution open for me
JS7	My format authority provides me with adequate power over the conduct of subordinates
JS8	I can give better performance if some more time is available to my discretion.
JS9	I don't have sufficient number of people to carry out the assignments.
JS10	Speed of technological changes make problem in my job
JS11	A large proportion of my job is a rush job.
JS12	Often I am asked to speed up my job
JS13	I have enough authority to discipline the people in my work
JS14	I receive an assignment without adequate resources and materials to execute it.
JS15	I am required to do things that should be done differently.
JS16	I work with two or more work groups who work quite differently
JS17	I receive conflicting direction from two or more personnel
JS18	I do thing that are acceptable to one person but not to others

reworded as “management”. The below mentioned tables (table 3.5) provide the details of the codes and items.

Table 3.5 *Ethical work climate Items in the questionnaire*

Code	items
EWC1	My plantation has a formal, written code of ethics
EWC2	My plantation strictly enforces a code of ethics
EWC3	My plantation has policies with regards to ethical behavior
EWC4	My plantation strictly enforces policies regarding ethical behavior
EWC5	If workers in my plantation is discovered to have engaged in unethical behavior that results primarily in personal gain (rather than corporate gain), he or she will be promptly reprimanded
EWC6	If a worker in my plantation is discovered to have engaged in unethical behavior that results in primarily corporate gain (rather than personal gain), he or she will be promptly reprimanded
EWC7	If a worker in my plantation is discovered to have engaged in unethical behavior that results in primarily corporate gain (rather than personal gain), he or she will be promptly reprimanded

3.5.4 Measurement on Psychological Contract (PC).

According to Zhao et al. (2007), global scales have an advantage over specific scales when the research focus is not a particular type of content, as was the case in the current study. Global scales capture the full domain of psychological contract content, and by responding to global scales, respondents may unconsciously weigh the importance of the promises, which has been identified as an important aspect of contract breaches (Conway

& Briner, 2005; Zhao et al., 2007). Finally, content-specific measures may overlook important obligations between workers and organizations because not every obligation can be measured (Conway & Briner, 2005). Considering the previous instruments in the area of psychological contract and contextualising the topic to oil palm plantations in Malaysia, the study preferred a global scale, which may be adopted to collect the data. The psychological contract breach instrument, which was developed by Robinson and Morrison (2000) is a 5-item instrument designed to measure workers' global perception of a psychological contract breach. A Likert-type scale anchored by (1) strongly disagree, (2) disagree, (3) undecided, (4) agree and (5) strongly agree, was used to indicate the extent of agreement/disagreement with each item. A sample item is "I feel that my employer has come through in fulfilling the promises made to me when I was hired". A Cronbach's alpha of 0.89 was obtained for this measure by Robinson and Morrison (2000). The scale provides an overall measurement of the extent to which the worker's psychological contract has been fulfilled. Items, 1, 2, 3 were positively worded while items 4 and 5 were negatively worded.

Table 3.6 *Psychological contract Items in the questionnaire*

Code	Items
PC1	Almost all the promises made to me by my employer during recruitment have been kept so far
PC2	I feel that my employer has come through in fulfilling the promises made to me when I was hired.
PC3	So far, my employer has done an excellent job of fulfilling its promises to me.
PC4	I have not received everything promised to me in exchange for my contributions.
PC5	My employer has broken many of its promises with me even though I've upheld my side of the deal

3.6 Questionnaire Design

A questionnaire is a pre-formulated written set of questions used for data collection, which is required to measure the variables (Sekaran & Bougie, 2010). In this research, the questionnaire consists of three parts; part 1, part 2 and part 3. In designing the questionnaire for this research, an itemized rating scale is used. An itemized rating scale has a number or a brief description associated with each response category (Malhotra, 2010). Measurement scale is important since the type of scale used in taking measurements directly impacts the statistical techniques that can be used.

Part 1: General information contain 11 items, In part one, the eleven general questions asked were gender, age, number of family members, country of origin, years of experience, income, way of recruitment, passport holding status, marital status, and ethnicity. These dimension's incorporation is nominal in nature.

Part 2: Items related to independent variables like ethical work climate consists of 7 items and psychological contract consists of 5 items ethical work climate follows 7 point scale and psychological contract follows 5 point scale.

Part 3: Items related to dependent variables include the job stress, which consists of 32 items and intention to leave which consists of 3 items. Job stress follows 5 point scale and intention to leave follows 5 point scale, in this research.

The overall questionnaire is including socio-demographic variables, endogenous variable and exogenous variable thus providing a total of 47 items that using different rating scales.

The questionnaire was originally written in English and then translated into Bahasa Malaysia language (by Fakulti Bahasa Moden Dan Komunikasi, Universiti Putra Malaysia) to ease communication and to ascertain that the translation was equivalent. The questionnaire was then back-translated into English to ensure accuracy (Douglas & Craig, 1983).

3.7 Pretesting

The questionnaire was designed as the survey instrument for this study. It is important to pretest the instrument to ensure that the questions are understood by respondents and that there are no problems with the wording or measurement (Sekaran & Bougie, 2010). The initial questionnaire was given to eight Human Resource Management lecturers to review in order to ensure that the concepts used are clear and relevant for the study, for face validity.

3.8 Pilot testing

According to Zikmund, Babin, Carr, & Griffin, (2010), to administer the questionnaire, a pilot-test should be conducted on a selected segment of the overall population. This means the administration of questionnaire to a smaller segment of foreign workers from small and medium scale oil palm plantations in the Sabah region of Malaysia. A pilot test is a smaller version of the main questionnaire distribution that is carried out on a small representative population (Zikmund et al., 2010).

The reason for the pilot test is to ensure that the items in the questionnaire are understandable, clear and readable. It gives researchers the opportunity to make important amendments (Zikmund et al., 2010). A pilot study was planned as part of the scale development methodology for the following reasons; (1) to ensure a comprehensive analysis for a range of perspectives, (2) to detect any possible problems associated with the format, wording, and measurement, and (3) to ensure that the respondents comprehended the instructions, questions, and scales.

Thus, the administration of questionnaire to a smaller segment of foreign workers from small and medium scale oil palm plantations in the Sabah region of Malaysia was conducted with a sample size of 100 foreign workers. The locations from where the data were collected includes; Sandakan, Tawau, Kudat, West Coast (Pantai Barat) and Interior (Pendalaman). From five locations a total of 100 respondents were initially interviewed (schedule) and data was collected. Further, in order to ensure the sample representation, 100 foreign workers from each location were considered. Though some reluctance was faced by the researcher in the initial level of interaction with foreign workers, later they have shown their cooperation to provide relevant information the items posed. The data thus ensured respondents equal representation. The changes were made on the final questionnaire after analysis of pilot data. The data was analyzed using SPSS to obtain the reliability results and factor analysis (Convergent validity).

3.9 Factor Analysis

3.9.1 Factor Analysis of the Pilot Study: Independent Variables

Confirmatory factor analysis is used to determine how many latent variables underlie the complete set of items (Tabachnick & Fidell, 2007). CFA is conducted by using extraction method, principal component analysis, Varimax rotation method, with Kaiser Normalization (Kaiser, 1958; Cureton & Mulaik, 1975); eigenvalues; percentage of variance; and percentage of cumulative variance. All these processes are captured in the six steps of factor analysis proposed by Rietveld and Van Hout (1993). The Kaiser Meyer Olkin (KMO) or Measure of Sampling Adequacy (MSA) of independent variables (five exogenous latent variables) reading of 0.926 (> 0.5) is above the minimum requirement

and Bartlett's Test of Sphericity which stands at significant level of 0.000 ($\text{sig} < 0.05$) thus, making the following factor analysis permissible (Hair et al., 2010).

Table 3.13 (refer appendix) illustrates the result of the Confirmatory Factor Analysis (CFA) through SPSS. The final result produced two (2) components (exogenous latent variables) with Eigenvalues above 1 and explaining a total of 71.592 percent of variance cumulatively.

Factor one (1) which was Psychological Contract (PC) now consists of five (5) items and all the items were accepted, with the variance explaining about 17 percent. The five (5) items of PC were consistent with the construct.

Factor two (2) was an Ethical Work Climate (EWC) consisting of seven (7). Ethical Work Climate indicated a 15 percent variance explained.

3.9.2 Factor Analysis of the Pilot Study: Dependent Variables

Table 3.11 and 3.12 (refer appendix) showed the result of The Kaiser Meyer Olkin (KMO) or Measure of Sampling Adequacy (MSA) of dependent variables (two endogenous latent variables) reading of 0.905 (>0.5) was above the minimum requirement and Bartlett's Test of Sphericity stands at significant level of 0.000 ($\text{sig} < 0.05$). Finally, the pilot study results represented two (2) components (endogenous latent variables) with Eigenvalues above 1 and explained a total of 71.591 percent of variance cumulatively.

The first factor Job Stress (JS) remained with thirty two (32) items which had been proposed originally. Its factor loading above 0.50 were selected, and it explained 14.25 percent of variance in the first factor.

The second factor produced by CFA was Intention to Leave (ILI), which now consists of three (3) items and all the items were accepted, with the variance explaining about 34.966 percent.

To conclude, the CFA indicated four (4) factors (two exogenous latent variables and two endogenous latent variables) that were the likely constructs of each measure. The internal consistency of each construct were somewhat substantiated.

3.10 Reliability

The reliability of a measure implies stability and consistency of an instrument in terms of how it measures a concept and how it aids the assessment of the 'goodness' of a measure (Cavana, Delahaye, & Sekaran, 2001). There are two aspects of reliability measurement. They are stability of measure and internal consistency of measures. Cronbach's alpha is a method that requires taking the average of all coefficients for the measurement of the internal consistency of the scales (Hair et al., 2010). Cronbach alpha is the measure of reliability that ranges from 0 to 1, with values of 0.60 to 0.70 deemed the lower limit of acceptability (Hair et al., 2010).

All measures of the pilot study (47 items) achieved a Cronbach alpha level beyond the recommended level of 0.60, thus passing the minimum requirement. As presented in

Table 3.7, reliability analysis of the pilot study measures its stability over various conditions.

Table 3.7 *Reliability Test for the Pilot Study*

Name of Variable	Item	Cronbach's Alpha
Intention to leave	3	0.90
Job stress	32	0.86
Ethical work climate	7	0.89
Psychological contract	5	0.89
Total	47	

This study utilized four (4) factors that contained a fourty seven (47) measurement items, which were adapted from the literatures and self-development. It used standard psychometric scale development procedures which had achieved a Cronbach alpha level of 0.60. Furthermore, the pilot study was conducted with 100 plantation workers. It investigated the confirmatory factor analysis (CFA) of all four (4) factors that were the likely constructs of each measure. The result remained ninety one (47) items that had achieved a Cronbach alpha level of 0.84. These were rather substantiated and are consistent with the constructs.

3.11 Validity Analysis of Pilot Study

Validity of the instrument is referred to as the accuracy of instrument. An instrument is said to be valid when it has the ability to measure for what it is supposed to (Sekaran & Bougie, 2010). Hence, a valid instrument is considered to be free from errors and bias (Webb, 2008). At this stage the researcher checked content validity and the face validity

of the instrument. However, the validity and reliability required for the main data, mentioned in Table 3.4 has been reported with detail in chapter four of the study.

3.11.1 Content Validity

It is better for researchers to check the face or content validity of the instrument at the construction phase of any research inventory (Marnat, 2010). In fact, content validity is referred to as a non-statistical procedure for inspecting any particular inventory. This is basically held to determine whether the specific instrument is able to cover the overall dimensions mentioned in the particular study (Marnat, 2010). Moreover, the content validity also helps to know whether the instrument is understandable to the respondents (Long, 2013). According to Ruane (2005), content or face validity is the “assurance of the content quality of an instrument and its ability to measure a phenomenon” (p.136). The content validity of the instrument first has been established through a comprehensive review of literature. In addition to this, the face validity of the instrument was determined through opinions of academicians of related field. Therefore, before going toward pilot study, the questionnaire was presented to the experts for their opinion regarding the content validity of the questionnaire in particular settings of Sabah. At the end of the questionnaire, the researcher also provided an open ended question sections regarding improvement in plantation. However, in order to assess the face and content validity, an expert panel of eight PhDs, each having national and international publications and reasonable academic experiences. The panel gave minor suggestions regarding the wording and contents of the questionnaire, because the researcher utilized the well-

known and widely accepted inventories for the study. The panel consisted of the following eight (8) senior faculty members from Malaysia, Indonesia, India and Oman.

3.12 Actual Questionnaire Statements

From the results of the pilot study, the final questions or items with high factor loading above 0.50 were included in the actual questionnaire that now consists of 47 items.

3.13 Demographic variables

Demographic variables such as gender, age, number of family members, country, type of job, years of experience, salary range, recruitment way, passport, marital status, and ethnic. Proper coding was used to facilitate the data analysis. The questionnaire is closed ended with fixed choices.

3.14 Sampling Method

Sampling involves the determination of the study's population, sample frame, and sample size. Each subject will be discussed in the following paragraphs.

3.15 Population

Polit and Hungler (1999) refer to the population as an aggregate or totality of all the objects, subjects or members that conform to a set of specifications. It is the totality of all subjects that conform to a set of specifications, comprising the entire group of persons that is of interest to the researcher and to whom the research results can be generalized. This particular study is aimed at investigating the determinants of job stress and workers intention to leave the oil palm sector in Malaysia. To figure out the population of the

study the researcher has looked into the overall plantation industry in Malaysia. Palm oil production in Malaysia is dominated by major players like FELDA, IOI, SIME DARBY, FELCRA, ASIATIC, KULIM, GOLDEN HOPE and few other companies. The private sector is own up to 62% of the land where the oil palm is planted in Malaysia. 62% of the Malaysian palm oil industry are controlled by large companies, 23% by nationalized entities and the remaining 15% by owners of SME plantations. These plantations spread around Peninsular Malaysia, Sabah and Sarawak region of Malaysia. Sabah has the higher-centralized oil palm plantation area. Out of the total planted land area of 5,392,235 hectares, Sabah owns the largest (28% of the total planted area) having 1,511,510 hectares in Malaysia (MPOB, 2015).

Dominance of foreign workers in the plantation sector in Malaysia is not rather uncommon. Statistics published by the Malaysian Labor Department (2008) stated that a total of 300,000 foreign workers employed in farm and industrial commodities, especially in oil palm plantations (Johari, 2008). Malaysia Palm Oil Board Statistic in 2010 recorded a total of 500,817 plantation workers, which 73.69 % of them were foreign labor and 94.81 % were from companies operating as oil palm harvesters. The plantation sector in Sabah has a shortage of 272,157 and if we look into the statistics, foreign workers more at present of which majority are from Indonesians and Philippines. The current statistical data indicate that, the Indonesian workers constitute the larger group in Malaysia. They comprise approximately 68%-70% (1.2-1.5 million) of all foreigner workers and rising to 2 million taking into account undocumented illegal workers. Among the Indonesian worker in Malaysia, the plantation laborers consist of the larger

group with 26% (MPOB, 2014). Thus the estimated population of small and medium holders includes 28,016 and above foreign workers.

3.16 Sampling frame

Polit, Beck and Hungler (2001) defines a sample as a proportion of a population. As it is indicated above, in order to explore the issue related to labor turnover in oil palm plantations, this study considers the Sabah region of Malaysia as its populations. As indicated above, these plantations are operating with 90% foreign workers. One could observe legal and illegal foreign workers employed across the plantations jobs. Since information regarding the foreign workers employed in such plantation is very much sensitive, an accurate figure of total foreign workers is difficult to gather. Further a permission to get in touch with these foreign workers was also found challenging. Hence, the size of the oil palm plantations was used as the basis for calculating total foreign workers. Thus, the sample was chosen from foreign workers working in the small and medium sized plantations in the Sandakan, Tawau, Kudat, West Coast (Pantai Barat) and Interior (Pendalaman) region of Sabah, Malaysia.

As per the report of State Environmental Conservation Department (ECD), Sabah, Malaysia (2013), small plantations are coming under the coverage of Less than 500 ha and the medium is below 5000 ha. Henceforth, it is estimated that if the plantation area is 5000 hectares and below, 255 plantations are available in the Sabah region of Malaysia.

3.17 Sampling size

Because it is practically impossible to gather all the data from a population, selecting who participates in a survey is a fundamental issue (Gill & Johnson, 2010). Salkind (2003) opined that an appropriate sample size is needed for any research because a sample size that contains a very small number of respondents may lead to committing Type I error, which create the chances of wrongfully rejecting a result instead of being accepted. Sekaran (2003) also cautioned that a sample size that is too large is not appropriate because of the problem of Type II error, which makes the results to be accepted instead of rejecting the results. Following the aforesaid arguments, this study accesses various sample procedure to determine a higher sample size that was suitable for achieving a high response rate for this study.

According to Gill and Johnson (2010), there are several statistical formulas available in determining sample size. Cohen (1988); Hair, Hult, Ringle and Sarstedt, (2014) argued that it is important to determine sample size using an appropriate power of the statistical test. Similarly, Ramalu (2010) suggested that even though researchers have determined a sample size to be used through other methods, researchers should also look at power analysis in order to clearly detect the effect of different sample size. Following this, this study runs a power analysis using G* Power 3.1.9.2 software package (Faul, Erdfelder, Lang, & Buchner, 2007). Four (4) independent variable equations were presented to G* Power software package to determine the sample size. In line with Cohen (1988) the researcher uses the following standard to calculate the sample size: effect size ($f^2 = 0.15$); significance alpha level ($\alpha = 0.05$); desired statistical power ($1 - \beta = 0.95$); with overall

predictors of ten (for overview, see theoretical framework). Figure 3.2 below show the result of the power analysis.

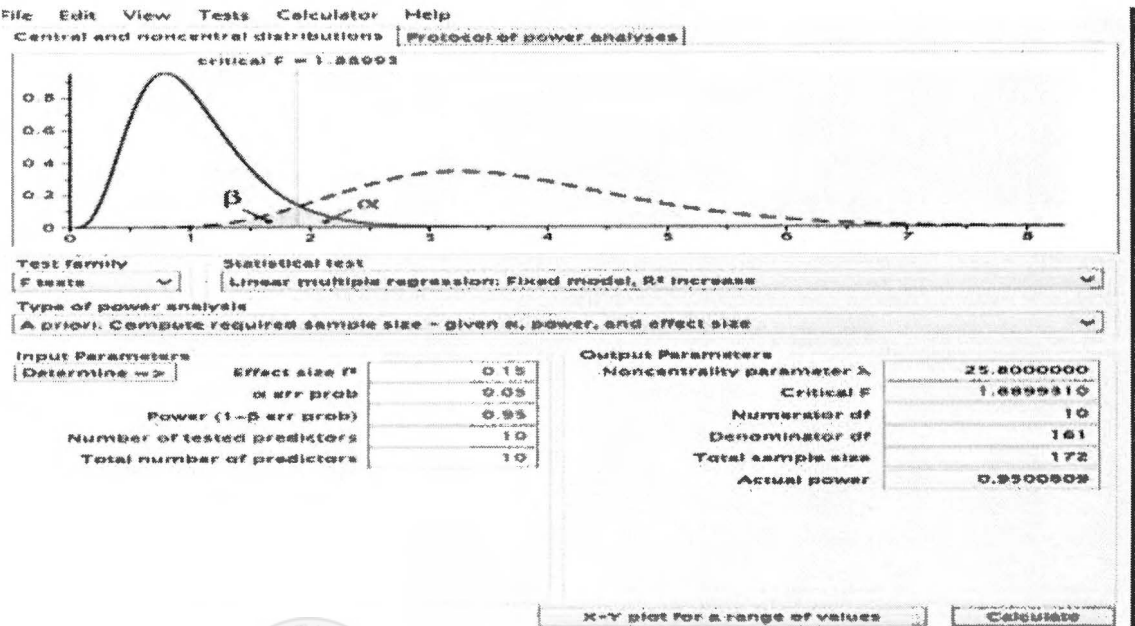


Figure 3.2
G- Power Analyses for Medium Effect

Similarly, Hair et al. (2010) argued that, as a rule of thumb, fifteen (15) to twenty (20) respondents for each variable is sufficient to achieve normality in a model. However, the sample size of 172 from the G* power analysis and Hair et al. (2010) recommendation is not sufficient for this study considering the level of non-response bias commonly identified by foreign workers in oil palm plantations in the Sabah region of Malaysia.

However, to avoid this problem the researcher decided to utilise Krejcie and Morgan sample size recommendation in determining the sample size of this study. Applying Krejcie and Morgan (1970) a sample size of 397 respondents is suitable for this type of study. This is because the larger the sample the lesser the chances that the findings will

have a bias (Gill & Johnson, 2010). Besides, a larger sample of 354 will make statistical significance test sensitive (Hair, et al., 2010). Hence a total of 550 questionnaires were scheduling to achieve high response (Bryman & Bell, 2007).

3.18 Sample size determination

The research followed both probabilistic and non-probabilistic sampling plan to arrive at the required sample size. The probabilistic sampling which comprises of cluster sampling and disproportionate stratified sampling methods. The non-probabilistic sampling consists of purposive or judgmental sampling.

The oil palm plantations are located in vast areas and it is amenable for a cross sectional study design to reach them at every respondent covering all the 5 geographical divisions in the Sabah region of Malaysia. Further, accurate statistics are not available to arrive at a fixed number so that appropriate sampling method may be chosen. Hence, particular study followed cluster sampling as the sampling method to arrive at a proportionate sample size. Cluster sampling is usually selected over (the more statistically precise) random sampling when the geographic area is large, and will be too difficult, costly, and/or lengthy to cover the entire area with random sampling. This method also appropriate because oil palm family members lists are not available or do not meet the criteria needed for random sampling. The study considers the geographical location of the small and medium scale oil palm plantations as the major cluster. As in general, Sabah divided into 5 division which are Kudat, Tawau, Sandakan, Interior (Pendalaman) and West cost (Pantai barat) by the land authority.

In cluster sampling, a population of elements can usually be considered to be a hierarchy of different sized groups or clusters of sampling elements. The use of cluster sampling in research is sometimes undertaken as an alternative to simple random sampling in order to reduce research costs for a given sample size. Therefore, the population of foreign workers was grouped into a number of families in each small and medium scale oil palm plantations located in five division in the Sabah region of Malaysia as stated in the table 3.8.

Table 3.8
Oil Palm Plantation Distribution in Sabah

Region	Planted Area (S)	No. of Small	Planted Area (M)	No. of (M)Plantati	Plantation Selected	Family	Responden + Estimate	Workers
Sandakan	10,209 (1,201)	52 (26)	128,320 (12,83)	63 (31)	49	5	245	14,031
Tawau	13,003 (1300)	50 (25)	90,833 (9083)	46 (23)	40	5	200	10,383
Kudat	6886 (688)	22 (11)	3014 (301)	2 (1)	12	5	60	989
Interior (Pendalaman)	1295 (129)	4 (2)	17,034 (1703)	8 (4)	6	5	30	1,832
West Coast (Pantai Barat)	1051 (105)	4 (2)	6762 (676)	4 (2)	4	5	20	781
TOTAL	32,444	132	245,93	123	127	25	550	28,016

Source: reproduced from MPOB & Borneo trade (2013).

The study consists of 255 (132 small and 123 medium scale oil palm plantations) small and medium scale oil palm plantations. The topic selected for the study was so sensitive and the foreign workers settlements were deep inside the plantations, which were amenable to engage in safe data collection process. Moreover these plantations are filled

with legal and illegal workers, whose list was neither shared by the plantation management nor the MPOB like institutions. Further in relation to the land area as well as the number of foreign workers available in the small and medium scale oil plantations there is high level disproportion, varied from region to region. Hence, the study followed purposive or judgmental sampling, soon after the cluster and disproportionate stratified sampling.

Purposive sampling is an informant selection tool commonly used in social sciences. The purposive sampling technique, also called judgment sampling, is the deliberate choice of an informant due to the qualities the informant possesses. It is a nonrandom technique that does not need the underlying theories or a set number of informants. In this sampling technique, the researcher decides what needs to be known and sets out to find people who can and are willing to provide the information by virtue of knowledge or experience (Bernard 2002, Lewis & Sheppard, 2006). In this particular research after geographical segregation of plantations with the support of cluster sampling the study followed stratified proportionate random sampling to arrive at the unit of analysis. Considering the unique nature of the sample whether the respondent staying deep inside the plantation. The study observed it's difficult to follow a probabilistic sampling technique. If the researcher does not intend to generalizing beyond the sample, one of the non-probability sampling methodologies provide in table 3.9 for the desired information. In order to get the optimum level of reliability on the items in cooperated in the concept selected for the study, study further followed purposive or judgmental random sampling.

Table 3.9
Sampling size by Division

Division	Small	Medium	Number of People in Strata
Sandakan	239/3423*1201=84	240/24593*12830=125	209
Tawau	239/3423*1300=91	240/24593*9083=89	180
Kudat	239/3423*688=48	240/24593*301=3	51
Interior	239/3423*129=9	240/24593*1703=17	26
West Coast	239/3423*105=7	240/24593*676=6	13
Total	239	240	479

Purposive sampling is especially exemplified through the key informant technique (Bernard, 2002; Gustad, Dhillon, & Sidibe, 2004; Jarvis, Miller, Sheahan, Ploetz, Ploetz, Watson, Ruiz, Villapan, Alvarado, Ramirez, & Orr, 2004; Lyon & Hardesty 2005), wherein one or a few individuals are solicited to act as guides to a culture. Key informants are observant, reflective members of the community of interest who knows much about the scenario, practices or culture and are both able and willing to share their knowledge (Bernard, 2002; Campbell, 1955; Seidler, 1974; Tremblay, 1957). Hence with the support of purposive sampling, this particular study identified appropriate respondents who can impart appropriate knowledge on ethical work climate and physiological contract between workers and management in the oil palm plantations.

From each of these small and medium scale oil palm plantations, 5 families were selected purposively. Further one foreign worker was selected from each family by ensuring the

best source of information about the research and its reliability closest to the variables selected for the study. Only those families in which foreign workers were living during the data-gathering period were incorporated into the study. The step followed in the sample size determination includes:

- Following the cluster sampling the total oil palm plantation area of Sabah was geographically divided into five location;
- five geographical locations have both small and medium scale plantations;
- Following disproportionate stratified random sampling, small and medium scale oil palm plantations were further segregated into based on list of available from the directory of MPOB & Borneo trade (2013);
- Followed by geographical and size based segregation (strata) 132 small and 123 medium scale oil palm plantations were finally identified into;
- With due respect to the difficulty of reachability of geographical locations, availability of foreign workers, 5 families were identified purposively (following purposive or judgmental sampling) from each plantation, there after fixing the criteria of at least one foreign workers;
- the criteria fixed by identification of foreign worker include; a minimum of 3 years working; living with family member; and were from Indonesia and Philippines.
- based on purposive sampling, 5 foreign workers were thus identified from each plantation for data collection; and
- a total of 550 sample size is finally determined.

For this current study, a sample size of 379 respondents found adequate that were calculated from the available estimate of workers indicated by MPOB (2015) and the availability of population of foreign workers working in the Sabah region of Malaysia. The sample size obtained for this study was appropriate according to the rules of thumb proposed by Roscoe (1975) such as that simple size larger than 30 and less than 500 are appropriate for research, and Hair et al. (2010) recommend the sample size for SEM analysis should be 150 – 400 sample size or several times (preferably 10 items or more) as large as the number of variables.

A sample size should be chosen to achieve the most desirable balance between the chance of making an error, the cost of this error and the cost of sampling error. The idea is to find an optimal sample size, which minimize the total cost of sampling error. A larger sample is much more likely to be the representative of the population (Ary, Jacobs, & Razavieh, 2002). A sample size can be determined based on the method recommended by Krejcie and Morgan (1970). Based on the table proposed by Krejcie and Morgan (1970) the minimum sample size required for the present study is 379 foreign workers from small and medium scale oil palm plantations in the Sabah region of Malaysia. Following the ideal sample size prescribed by Krejcie and Morgan (1970) and the availability of 127 small and medium-sized oil palm plantations in the Sabah region of Malaysia. This particular study considered 497 subjects as its sample size. The sample size requirements may vary depending on statistical techniques used. Since the population consists of both male and female workers, both genders were considered relatively with the subjects available from each small and medium scale oil palm plantations. Further, the plantation

consists of a varied number of age groups, the study also considered the representation of each age group in order make randomization possible.

3.19 Sample Size Requirement for SEM

The minimum sample size requirements may vary depending on statistical techniques used. The recommended sample size for SEM analysis is 100-400 sample sizes or 10 times the number of observed variables (Hair et al., 2010). This means a minimum of 380 (38x10) sample sizes are needed for analysis in SEM.

3.20 Data collection method

Polit and Hungler (1999) define data as information obtained during the course of an investigation or study. In this study, the researcher followed scheduling to obtain data relevant to the study's objectives and research questions. The purpose of the study was to identify the determinants of job stress and the reasons for the intention of workers to leave from small and medium oil palm plantations in the Sabah region of Malaysia. As indicated in the research design section, this particular study follows quantitative data collection methods and tools.

In the present study, the actual data collection started in the month of October 2014 month and lasted for six months (i.e. between October 11th, 2014 to April 31st, 2015). The data was collected through a self-administered questionnaire. In the initial stage of data collection, an official letter was collected from the Othman Yeop Abdullah Graduate School of Business (OYAGSB), introducing the researcher and explaining the purpose of

the study. This was to enable the researcher gets support from the small and medium plantation owners to get the authenticity of the research.

The study lasted six months in order to reach almost all regions, where small, medium plantations are located, with foreign workers are present. The study covered five divisions viz., Sandakan, Tawau, Kudat, West Coast (Pantai Barat) and interior (Pendalaman) region of Sabah, Malaysia. The researcher approached each plantation owner and briefed them on the purpose of the study.

It is practically impossible to collect data without encountering some problems. Few of the major problems encountered during the course of data collection were related to geographical location, sensitivity of the study topic and the reluctance on the part of owners as well as the foreign workers. Some of the owners are reluctant to enable the schedule process though some owners are allowed. The same was observed with foreign workers, since they feared to interact with the researcher due to fear of plantation management. The study has to concentrate more on those small and medium scale oil palm plantations where the owners were permitted the researcher to meet the family members of the foreign workers and do the research.

To achieve 479 technically acceptable sample sizes, completed and returned questionnaires are targeted, 550 questionnaires were printed for scheduling the interview. Several researches have shown the total number of respondents were between 200 to 900 (Cho & Park, 2001; Flavian, Guinaliu, & Torres, 2005; Guenzi, Johnson, & Castaldo, 2009; Hoq & Amin, 2010; Taib, Ramayah, & Abdul-Razak, 2008).

Participants were informed of the confidentiality clause. Confidentiality implies that the dignity of a subject should be respected. Therefore, it was important that participants had no doubt that any personal information provided would be regarded as confidential (Ferreira, Lorenzetti, Bristow, & Poole, 1998). Participants are informed that their confidential information would only be accessed by the researcher and the researcher's supervisor. The participants were not to provide any personal details and as such, transcripts and hence the final report does not reflect the subject's personal information such as their names or identity. The respondents were asked to respond to the items posed in the questionnaire then and there. All the clarifications pertaining to the items were precisely made. The responses were then precisely entered into.

Overall, within a period of data collection, out of 550 questionnaires scheduling to the target participants, 497 questionnaires were returned with complete information the remaining 497 useable questionnaires were utilized for further analysis. This accounted for a response rate of 90%. For these reasons, researcher managed to get such response rate.

3.21 Data Screening Method

Prior of the initial step before performing the fundamental analysis, it is important to decide on a checklist for screening the data in order to find out the effects that the characteristics of the data may have upon the results. Screening is a time-consuming process that is often overlook because decisions made in the earlier steps influence the

decisions to be taken at the later steps. The screening procedures have evaluated the impact of missing data.

3.22 Statistical Tools for Data Analysis (PLS-SEM)

It is noted that every statistical test requires, some underlying assumptions and conditions to be met before testing the final models (Coakes & Steed, 2007; Levin & Fox, 1988). To draw inferences about study hypotheses, PLS-SEM technique was mainly employed for the data analysis. Moreover, the requirements of structural and measurement models were met through PLS-SEM by using SmartPLS 3.0.

Moreover, all of the hypothesis were discussed separately for better understandability of the readers. Each hypothesis is tested at 5 per cent level of confidence, which is the most commonly accepted level of significance in management and business studies (Cavana et al., 2001). As dearth of information exists in this specific area of study, therefore, two-tailed tests were conducted with variables because each relationship keeps two possible directions (Levin & Fox, 1988). Besides, following section explains the mediation process applied in the study.

Partial Least Square (PLS) is a second generation multivariate analysis technique that combines the features of the first generation (principal components and linear regression analysis (Fornell, 1982). This technique appropriately functions with structural equation models that have latent variables and series of cause-and-effect relationship (Hair, Hult, Ringle, & Sarstedt, 2014). PLS-SEM provides researchers an opportunity to explore relationships among variables and identify the existing pathways among the variables

(Hair et al., 2014). As such, it is regarded by Ringle, Wende and Will (2005) as an appropriate tool for building statistical model as well as prediction. This study specifically employed the use of PLS-SEM because of the following reasons:

Firstly, researchers have shown that PLS-SEM works efficiently by placing a minimum requirement on sample size to achieve adequate statistical power (Chin, 1998; Hair et al., 2014). PLS is advantageous to researchers due to its robustness of estimations and statistical power (Reinartz, Haenlein, & Henseler, 2009), which means that it is capable of rendering a specific relationship significant when it is indeed significant (Hair et al., 2013). It is indicated by Reinartz et al. (2009) that the sample size required by PLS-SEM is smaller compared to the other analytical tools. Following the rule of thumb in the application of PLS-SEM, which states that the sample size should be 10 times the largest number of the structural paths directed at a construct in a structural model (Chin, 1998). This study considers the use of PLS-SEM as an appropriate tool.

Secondly, PLS path has the ability to handle complex models with many structural model relations which makes it more appropriate to be applied in a real life phenomenon (Hair et al., 2014; Hulland, 1999). The soft modeling assumptions of PLS technique provides it with a greater ability to flexibly develop and validate larger complex models (Akter & Hani, 2011). Hair et al. (2014) asserted that PLS-SEM is without competition in a situation that involves several path models with latent variables and complex structural relationships. This study involved seven path models within the structural model, and thus using PLS-SEM technique is appropriate for better validation.

Thirdly, one of the issues in social science researches is data non-normality and the statistical properties of PLS-SEM provides a very robust estimation with data that have normal and extremely distributional properties (skewness and Kurtosis) (Reinartz et al., 2009). Non-normal data are relatively treated well in PLS, thus the usage of PLS in this study is appropriate to help in treating issues related to non-normality of data during the analysis.

Fourthly, the use of PLS-SEM has been demonstrated by past researchers as having an ability to test moderation effect (Henseler & Fassott, 2010; Goodhue, Lewis, Thompson, 2007; Chin, Marcolin, & Newsted, 2003). Bollen (1989) indicated that the result of PLS are more meaningful and valid while the conclusion of the results of the other analytical method are less clear which requires several other separate methods of analysis. In order to understand the complex relationship associated with social science research, the use of PLS-SEM is necessary in the application of more sophisticated multivariate data analysis method (Hair et al., 2014). As such, it is regarded as a powerful tool with the ability to simultaneously test several relationships. This study employed SmartPLS path modeling in establishing the measurement and the structural models. The measurement model provided an explanation on the assessment of the reliability and the validity of the constructs of the study, while the structural model was used to establish the correlation and the relationship effect among the constructs regression analysis.

3.23 Model Fit

In covariance based methods, it is important to mention that the assessments of overall model fit, i.e. goodness-of-fit indices are not strictly required in PLS-SEM (Chin, 2010; Hair et al., 2014). However in PLS-SEM, model validity is measured through predictive relevance Q². Generally, Q² values must be greater than zero for endogenous constructs in the structural model. Together with these resampling techniques, the Q² test, developed by Geisser (1975) and Stone (1974) is used to assess the predictive relevance of the endogenous constructs. This test indicates that how well observed values are reproduced by the model and its parameter estimates.

In addition, Variance Accounted For (VAF) (Helm & Garnefeld, 2010) has been benefited to determine the mediating effect of the study variables. Value of VAF while testing mediations, falls between 0% and 100%, higher the value of VAF stronger the mediation. In contrast, Hair, Hult, Ringle and Sarstedt (2014) argued that VAF value less than 20% is considered no mediation and VAF greater than 80% is considered full mediation hence, a value between 20-80% is considered as partial mediation. However, the study also followed the guidelines specified by Hair et al. (2014).

3.24 Software Available for SEM Analysis

There are different software available for conducting SEM analysis. For instance, AMOS (Arbuckle, 2003). SmartPLS (Ringle, Wende, & Will, 2005) PROC CALIS a part of SAS software (SAS Institute, 2013), LISREL (Jöreskog, & Sörbom, 2004), EQS (Bentler & Chou, 1987) and Mplus (Muthen B., & Muthen L., 2000). The current study has

employed SmartPLS latest version 3.0 for estimating the multiple regressions among the study variables.

3.25 Summary

The chapter started discussing the different types of research methodologies by explaining the appropriate research method and research design of the study. The study is a mixture of correlation and causal research. The research methods and the study sample have been selected according to the guidelines of previous studies. Using cluster sampling and non-probabilistic sampling, the researcher drew the sample of 497 respondents in the Sabah region of Malaysia. A direct interview/ scheduling interview was the source of data collection. The collected data was transformed in digital form by using SPSS (21 windows version). Moreover, the researcher utilized SPSS 21 and SmartPLS 3.0 for the data analysis. It also reported the criteria for validating the measurement and structural models. The analyzed results are discussed in chapter 4 and discussions and conclusions are summarized in the final chapter of the study. In summary, the chapter is closed by summarizing the overall research design of the study.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Overview

This chapter represents the results of the data analysis by also the testing of the various hypothesis proposed in this study. This is also in line with the methodology as well as with the research design. First, the primary analyses were conducted in order to avoid the violation of the underline assumptions for examination of multivariate analysis such as normality, linearity and homoscedasticity, detection of outlier, uni-dimensionality and accessing multi-collinearity among the studies variables. Furthermore, the third section provides the result of the descriptive statistic for the variables utilized in this study. This is immediately followed by the correlation analysis among the variables under investigation in this study. This is also equally accompanied by the testing of the relationship between variables through the use of structural equation model approach (SEM) with particular interest on the Partial Least Square (PLS), a variance based method. The details information about these sections flows as follows.

4.1 Normality Tests and Outliers

This section presents the checking for the normality of data and checking for the outliers. Although, the use of PLS SEM, a non-parametric approach does not require meeting of these assumptions according to Chin (2010); Hair, Ringle and Sarstedt (2011). However, the study went forward to conduct these assumptions test with a view to predict more accurate results. Hopkins & Weeks (1990) noted that normality of data is considered

inevitable for descriptive information particularly in any research analysis being it parametric or non-parametric approach.

4.2 Assessment of Homoscedasticity

Homoscedasticity is one of the assumption to be considered in this study. It is often referred to as the understanding that the variance in dependent variable exhibit similar amounts of variance across the range of values for the independent variables this assumption is made to ensure that the estimate of the parameter that define a model and significant test are accurate. The scatter plot shown in figure 4.5 indicated that homoscedasticity assumption is met because the residual appeared to be randomly scattered. This implies that there should be no systematic relationship within errors in the model and what the model predicts (Field, 2013). Further, to test whether there any inter correlated independent variable which highly correlate with each other multicollinearity test was conducted (Hair et al., 2014). In essence, what multicollinearity assumes to test for its dependence of assumption.

4.3 Multi-collinearity Analysis

Multicollinearity refers to a situation in which more exogenous latent constructs become highly correlated. The presence of multicollinearity among the exogenous latent constructs can substantially distort the estimates of regression coefficients and their statistical significance tests (Chatterjee & Yilmaz, 1992; Hair, Black, Babin, Anderson & Tatham, 2006). In particular, multicollinearity increases the standard errors of the coefficients, which in turn renders the coefficients statistically insignificant (Tabachnick & Fidell, 2007). As indicated above, the analysis of multi-collinearity was conducted

with a view to test the multi-collinearity among the independent of variables (Hair, Hult, Ringle, & Sarstedt, 2014). Several methods can be used to conducted multi-collinearity checking, and these include F-test, tolerance value and variance inflation factors. For this present study, the variance inflection factor (VIF) and tolerance tests were adopted and used to check for the multi-collinearity among the variables under investigation in this study.

According to Hair et al. (2014), a VIF of less than 5 indicates the absence of issue of multi-collinearity among the independent variables. In addition, the result must show the tolerance value of less than 0.1 to be free from the problem of multi-collinearity as suggested by Hair et al. (2014). In this study, two methods via SPSS were used to check for the problem of multicollinearity as suggested by Chatterjee and Yilmaz (1992); Peng and Lai (2012). First, the correlation matrix of the exogenous latent constructs was examined. According to Hair, Black, Babin and Anderson (2010), a correlation coefficient of 0.90 and above indicates multicollinearity among between exogenous latent constructs.

Table 4.1 *Collinearity Statistics-Intention to leave*

Coefficients ^a		
1	Collinearity Statistics	
	Tolerance	VIF
EW	.773	1.294
PC	.708	1.413

a. Dependent Variable: ILI

Table 4.2 *Collinearity Statistics-Job stress*

Coefficients ^a		
Model	Collinearity Statistics	
	Tolerance	VIF
EW	.773	1.294
PC	.708	1.413

a. Dependent Variable: JS

As shown in table 4.1 the correlations between the exogenous latent constructs were sufficiently below the suggested threshold values of 0.90 or more, which suggests that the exogenous latent constructs were independent and not highly correlated. From the multicollinearity from the table 4.1 and table 4.2 it can be seen that all the VIF value is < 5 and all the tolerance value are > 0.10 in line with the above benchmark this research doesn't observed any concern related to multicollinearity.

4.4 Descriptive analysis: Demographic characteristics distribution

The descriptive result for gender distribution indicates majority of them 348 representing 70 % are male while the rest of them 149 accounting for 30 % are female. Hence, majority of the plantation workers in Sabah are dominated by the male workers. Table 4.3 provides more details.

Table 4.3
Demographic characteristics distribution

Variable	Frequency	Percent
Gender		
Male	348	70.0
Female	149	30.0
Total	497	100.0
Country		
Philippines	148	29.8
Indonesia	349	70.2
Total	497	100.0
Salary		
0-200	173	34.8
201-400	222	44.7
401-600	101	20.3
601-800	1	0.2
Total	497	100.0
Passport holding status		
Yes	299	60.2
No	50	10.1
Waiting to get	148	29.8
Total	497	100.0

of them which account for 44.7% earn between 201 to 400; 173 of them representing 34.8% earn between 0 to 200 while the remaining of them 101 and just 1 accounting for 20.3% and 0.2% earn between 401 and 600; and between 601 and 800 respectively. Table 4.3 depicts the information. Also, the result of the descriptive of the analysis on the passport status of the foreign workers indicates that majority of the foreign workers in this oil palm plantation 299 of them representing 60.2% have a valid passport; 148 of them which account for 29.8% are in waiting to get status while the remaining 50 of the accounting for 10.1% do not have a valid passport. Table 4.3 show more details.

Similarly, the descriptive analysis also presents the result of the the number of family members of workers working in oil palm plantation. The table indicates that 3% of workers are married compare with big number of members to workers living single and small (97%) status. The descriptive statistic also look into the process of foreign workers recruitment in small and medium oil palm plantations. The table 4.3 indicates that majority of the recruitment were through family recommendation (88.5%) compare to the recruitment mandors (9.1%) or recruitment agents (2.4%). The respondents belong to all age groups starting from 15-20 (6.8%), 21-25 (4%), 26-30 (28%), 31-35 (56.9%) 36-40 (0.2%) and 40-45 (4%). The data indicated that majority workers belong to the age group of 31-35 (56.9%) and further to 26-30 (28%).

4.5 Descriptive Statistical Analysis

Descriptive statistics such as mean and percentage were used to measure the percentage of variables and also used to describe the mean of dependent and independent variables.

Table 4.4 below shows mean of customer satisfaction for the variables;

Table 4.4 *Descriptive Statistics of Variables*

	Variable Name	Minimum	Maximum	Mean	Std. Dev
Y1	Intention Leave	1.00	5.00	3.9012	.56057
Y2	Job Stress	1.00	5.00	3.9991	.43175
X1	Ethical work climate	1.00	7.00	2.9746	.58376
X2	Psychological contract	1.00	5.00	2.8331	.57883

The mean value of Intention to Leave was 3.9012; this reveals that the worker satisfaction was moderately high as the minimum value was 1.00, and the maximum value was 5.00. In addition, there are small differences between the values of Intention Leave as indicated by the low value of the standard deviation (0.56057).

Based on the table above, the mean value of Job Stress was 3.9991, which means that the Job Stress was moderately high because the minimum value was 1.00 and the maximum value was 5.00. Besides, there are small differences between values of Job Stress because the standard deviation was low (0.43175).

In addition, the mean value of Ethical work climate was 2.9746. This means that the Ethical work climate was moderately high because the minimum value was 1.00 and the maximum value was 7.00, and the differences were small between the values of Ethical work climate because the standard deviation was low (0.58376).

Finally, the mean value of Psychological contract was 2.8331, which means that the Psychological contract was moderately high because the minimum value was 1.00 and the maximum value was 5.00. Besides, there are small differences between values of Psychological contract because the standard deviation was low (0.57883).

4.6 Common Method Variance Analysis

This particular analysis was conducted in order to identify if a single factor explains for the majority of the variance (Malhotra et al., 2006). A common method bias CMB is related to the external effects on the studies measures. CMB mostly occurs when the study variables are measured in the same place concurrently by the same respondent (M. Podsakoff, MacKenzie, Lee, & N. Podsakoff, 2003). The study strictly relied on plantation foreign workers as a single respondent to rate the questionnaire. Therefore, the possibility of potential CMB is likely to occur.

For this reason, a confirmatory factor analysis (CFA) test becomes very important to test the CMB. The results of this test must reveal more than one factor having >1 (Eigen value). Apart from that, no single factor must explain significant amount of variance (Podsakoff et al., 2003). The results confirmed that no single factor explained a greater

amount or half of the total variance. This clearly shows there is lack of variation in the data and results are showing lack of CMV.

4.7 KMO and Barlett Test

The KMO (Kaiser-Meyer-Olkin) is used to check the data appropriateness of sampling adequacy and Barlett's test is used to track the data suitability for further analysis. The cut off value of KMO for factor analysis is required ≥ 0.6 (Tabanick & Fidell, 2001). Also, Hair et al. (2006) suggested a value of $KMO \geq 0.7$ is considered adequate high for sample size of any study. In this particular study, KMO statistic for the overall data was 0.87 as indicated in table 4.5 and table 4.6. This is considered good enough for data analysis. From the analysis result, the Bartlett's test of sphericity test was also significant at 0.001 ($p < 0.001$). Table 4.5 and table 4.6 provide detail results of the KMO values for all constructs which range from 0.578 to 0.898.

Table 4.5 *KMO and Bartlett Test with overall data*

KMO and Bartlett's Test				
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.				.870
Bartlett's Sphericity	Test of	Approx. Chi-Square		1491.560
		df		497
		Sig.		.000

Table 4.6 *KMO and Barlett test Construct-wise*

Constructs	KMO	Bartlett's Test
Ethical Work Climate	0.896	.000
Psychological Contract	0.735	.000
Intention to Leave	0.578	.000
Job Stress	0.898	.000

4.8 Correlations among variables

The Pearson's correlation is used to measure the significance of linear bivariate between the independent and dependent variables. Variable association refers to a wide variety of coefficients which measure the strength of a relationship. Theoretically, the higher value of the correlation between two variables, the more related these variables are to each other (these values show the strength of relationships among variables). The direction of relationships among variables is another issue that should be considered in analysing the correlations between variables. A positive correlation indicates that the direction of the relationship is positive (if one increases, the other one increases).

A negative correlation indicates an inverse relationship between variables (if one increases, the other one decreases). Bivariate Correlations is used to know the nature, direction and significance of the bivariate relationship of the variables of this study. Therefore, the researcher used the Bivariate Correlations procedure to compute Pearson's correlation coefficient. Table 4.7 shows the Pearson's correlation coefficient of the variables of the study. A rule of thumb is that Multi-Collinearity may be a problem if a

correlation is $> .90$, in the correlation matrix formed by all the independent variables (Hair et al., 2006).

Table 4.7 Correlations among the variables

	Ethical work climate	Psychological contract	Job Stress	Intention to leave
Ethical work climate	1			
Psychological contract	.513(**)	1		
Job Stress	-.613(**)	-.532(**)	1	
Intention to leave	-.660(**)	-.593(**)	.691(**)	1

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

Based on the analysis presented in table 4.7, the results show that there is a negative correlation between the variables, the correlation between Ethical work climate and Job Stress, indicates that there was a significant correlation between two variables with coefficient correlation $r = .613$ at $p < 0.01$ level. The research result presents that there was a significant correlation between Ethical work climate and Intention to leave, $r = -0.660$ at $p < 0.01$ level.

It was found that there was a significant correlation between psychological contract and job stress, the coefficient correlation is $r = -0.532$ at $p < 0.01$ level. In addition, the correlation between psychological contract and Intention to leave shows significant result that is $r = -0.593$ at $p < 0.01$ level.

Furthermore, the result shows that, there was a significant correlation between job stress and Intention to leave, with the coefficient correlation $r = 0.691$ at $p < 0.01$ level.

4.9 Discriminant validity result

Discriminant validity is the last step to verify the quality criteria under measurement model. Basically, discriminant validity indicates the difference of reflective constructs among each other. It should be noted that in measurement models discriminant validity can be judged by using two different approaches i.e. Fornell-Lacker criterion and cross-loadings (Hair et al., 2011). Cross-loading is investigated at indicator level while Fornell-Lacker criterion examines discriminant validity at construct level. Specifically, Fornell-Lacker criterion posits that discriminant validity of a construct is met when the variance of its own measures exceed the value of variance shared with other constructs (Fornell & Larcker, 1981). In contrast, criteria of cross-loadings postulate that discriminant validity is achieved when indicator loading of the construct is essentially greater than its cross-loadings (Hair et al., 2011).

This was conducted using the Smart PLS SEM. The study model was tested through the two main stages which are the measurement model and the structural model. The goodness of measure is aimed at testing whether the adopted and developed instruments are good enough to measure the variables reliability measure and if the variables are actually measuring the concept (validity measure) (Cavana, Delahaye, & Sekaran, 2001). In assessing the measurement scale, reliability and validity of the scale was done.

Table 4.8 *Discriminant validity*

	EWC	PC	JS	IL
EWC	0.881			
PC	0.708	0.765		
JS	0.841	0.862	0.811	
IL	0.637	0.160	0.677	0.801

Based on table 4.8 above, it is clear that every construct has good discriminant validity. This is because almost all the correlation value is lower than the AVE of each construct. Thus, it can be concluded that each of the constructs are unique and able to capture the phenomenon that intend to measure. Having established the discriminant validity of the measure, this study further proceeded to exhibit the criterion validity of the measure as reported in the following.

Tables 4.8 characterized the criterion of Fornell-Lacker and the cross-loadings of the constructs, respectively. Fornell-Lacker criterion is proved as the square roots of all AVEs are higher than all inter-construct correlations, which provides support for discriminant validity confirmation based on Fornell-Larcker criterion (Hair et al., 2011). The results of cross-loadings revealed that indicator's loading of the constructs (of relative elements) are greater than other cross-loadings of items compare to other constructs in relative rows. In brief, both of these parameters are qualified against the criteria of discriminant validity as guided by (Fornell & Larcker, 1981).

To sum it up, the cut-off criteria required for the measurement model, regarding the validity and reliability of all reflective constructs is achieved against several criteria, such

as ‘indicator reliability’, ‘internal consistency’, ‘convergent validity’ and ‘discriminant validity’. It authorizes the study to investigate the structural models of the study (Chin, 2010) in the preceding sections.

4.10 Testing the measurement model

The reliability measurement is a data reduction and summarization technique. As noted during the pilot test, cronbach Alpha is a method used to determine the realibility of instruments and variables. It is the method that required taking the average of all the coffecients for the measurement for the internal consistency of the scale (Hair et al., 2010). For reflective construct in the measurement model, it is important to asses their reliability and validity. Indicators reliability and internal consistency of constructs are the terms that need to be catered into for the measurement of reliability. On the other hand, validity is confirm through convergent and discriminant validity (Chin, 2010).

This section explains the measurement model of the reflective constructs that are performed in Smart PLS which includes the indictor reliability, internal consistency, discriminant validity and convergent validity (Hair et al., 2010). In addition to that, it is also essential to verify the reliability and validity of predictor construct before assessing the final measurement model as suggested by Chin (2010). The results of outerloading and quality criteria of measurement model had been verify through smart PLS 3.0.

4.11 Indicator reliability

Indicator reliability usually shows if the indicator variance is explain by its reflective construct (Hair et al., 2010). The the rule of thumb suggests that indicator loadings in the reflective construct should be greater than 0.6 for already developed questionnaire and 0.5 for newly developed questionnaire (Zainuddin, 2010). Moreover, the factor loading of all items is calculated to know the unidimensionalty of constructs (Hair et al., 2011). The study examined the indicator reliability through the indicator loadings otherwise called the factor or outer loadings in PLS SEM. The overall model is based on the factor loadings of the entire variables of the study. Table 4.9 and 4.10 depicts that outer loading of the entire items are having the values greater than minimum speculated values i.e. ≥ 0.6 , required to meet the criteria (Hair et al., 2014).

Table 4.9
Indicator Reliability: Independent variable

Items	Code	1(EWC)	2(PC)
Ethical Work Climate (EWC)			
	EW1	0.81	
	EW2	0.83	
	EW3	0.78	
	EW4	0.78	
	EW5	0.82	
	EW6	0.68	
Psychological Contract (PC)			
	PC1	0.69	
	PC2	0.76	
	PC3	0.74	
	PC4	0.86	
	PC5	0.80	

Table 4.10
Indicator Reliability: Dependent variable

Items	Code	5(JS)	6(ILI)
Job Stress (JS)			
	JS1	0.69	
	JS11	0.59	
	JS12	0.54	
	JS13	0.60	
	JS14	0.55	
	JS15	0.66	
	JS16	0.54	
	JS17	0.60	
	JS18	0.53	
	JS19	0.62	
	JS2	0.59	
	JS20	0.56	
	JS21	0.69	
	JS22	0.57	
	JS23	0.55	
	JS24	0.52	
	JS25	0.53	
	JS26	0.55	
	JS27	0.60	
	JS29	0.53	
	JS30	0.58	
	JS31	0.57	
	JS32	0.61	

JS4	0.57
JS5	0.60
JS9	0.61

Intention to Leave (ILI)

ILI1	0.59
ILI2	0.82
ILI3	0.87

With reference the above table and with the evidence obtained from the results, all the items incorporated in the study achieved indicator reliability.

4.12 Internal consistency

This was used to ascertain the measurement model through the the internal consistency. It also ascertain whether the set of indicators are reliable or not reliable. For this analysis, both cronbach alpha and composite reliability are often used as the indicators. The reliability coefficient specifies how the indicator are closely related with each other by treating equal weight for indicator (Chin, 2010). The previous relevant statistical literature revealed that despite the importance of Cronbach's alpha in measuring the internal consistency among items, this index has been reported to have many limitations. The first limitation is that it tends to underestimate validating of the scale (Steenkamp & Trijip, 1991). Besides that, it assumes the equal reliabilities of all items but this assumption is rarely true (Bollen, 1989). To overcome some of the limitations of using

Cronbach’s alpha, the composite reliability was suggested in the Structural Equation Modelling (SEM) literature (Anderson & Gerbing, 1988).

On the other hand, Hair et al. (2014) argued that chronbach α normal under estimate the internal consistency reliability of refelective construct and is consider as conservative measure. Therefore, Hair et al. (2013) however argued that composite relaibility (CR) is better tool measure the internal consistency as compare to cronbach alpha. For safety pupose, this particular study utilized both Cronbach’s alpha and the composite reliability measures in order to have more accurate findings. Table 4.11 demonstrate that the results of the composite reliability and the values of cronbach alpha for all the relective constructs.

Table 4.11
Measurement Model Quality Criteria

	Cronbach Alpha	Composite Reliability	AVE	Communality
EWC	0.87	0.91	0.62	0.62
PC	0.84	0.90	0.60	0.60
JS	0.88	0.95	0.52	0.52
ILI	0.65	0.81	0.59	0.59

The results shown in table 4.11 indicate that entire study construct meet the satisfactory level of composite reliability and cronbach alpha meeting the minimum cut off value 0.7.

4.13 Constructs' Validity

Construct validity examines how well the results obtained from the use of a measure fit the theories upon which the test is designed (Sekaran & Bougie, 2010). As such, it provides answers whether the instrument used in the test tap the actual concept theorized in the study. In order to achieve validity analysis, two kinds of validity tests were performed on the measurement scales namely; convergent validity and discriminant validity (Sekaran & Bougie, 2010; Tore, 2005).

4.14 Convergent validity

Convergent validity is the third requirement to autodate the measurement model. The convergent validity is used to identify how an indicator is positively correlated with others indicators under the same umberalla of theoritical framework (Chin, 2010). As a general rule, the average variance extracted (AVE) is used to confirm convergent validty of reflective construct. In addition to that, AVE is also consider equal to communality of the construct in PLS SEM (Hair et al., 2014). Both measures were used in this study to specify the indicators avearge of square loading. However, the result demonstrated that values of construct of AVE are greater 0.5 and this values provided the evidence of convergent validity as they exit at least half of the extracted variance for every construct in the study model (Hair et al., 2011).

4.15 Assessment of structural model

The study hypothesis when converted to structural part are supported by the findings or not (Urbach & Ahlemann, 2010). The structural model can be analysed only after successful validation of measurement (Chin, 2010) model. Using PLS SEM, the structural models are used to evaluate coefficient of determination (R^2) and the path coefficient of relationship (β_1). It is argued by Hair et al. (2011) that the structural model must be analysed on growth of collinearity diagnostic statistic significant and the prediction relevants.

4.16 Collinearity assessment

Although, the data has been confirmed free from the issue of multicollinearity or collinearity among the independent constructs through the SSPS, the study still went further to confirm the collinearity diagnosis using PLS SEM via variance inflation factors (VIF). Collinearity problems can decrease the power of predicting variables (Hair et al., 2006). According to Hair et al. (2006), VIF values must be below 0.5 to confirmed the collinearity diagnostic.

The results reconfirmed the absence of multicollinearity in the structural model of the study. It shows the VIF values below cut-off value specified by Hair et al. (2014) for all the variables under investigation in this study. Table 4.12 and table 4.13 depict the statistic result for the entire variables in the structural model.

Table 4.12 *Collinearity Statistics (Dependent Variable: Intention to Leave)*

Coefficients ^a		
Model	Collinearity Statistics	
	Tolerance	VIF
EWC	.773	1.294
PC	.708	1.413

a. Dependent Variable: ILI

Table 4.13 *Collinearity Statistics (Dependent Variable: Job stress)*

Coefficients ^a		
Model	Collinearity Statistics	
	Tolerance	VIF
EWC	.773	1.294
PC	.708	1.413

a. Dependent Variable: JS

4.17 Significance of Structural Models

Structural model in PLS-SEM can be examined to find the statistical significance of all path coefficients between the exogenous and the endogenous constructs. In Smart PLS-SEM, bootstrapping is specifically used to obtain the values of the path coefficients through *t*-statistics with two-tailed test (Ringle, Wende, & Will, 2005).

Further, both jack knifing and bootstrapping are two commonly used approaches in PLS analysis. Both methods provide the standard errors and *t*-statistics of the parameters. The

rationale behind bootstrapping is that, path-weighting scheme can be applied to all kinds of structural models in PLS-SEM and it generates higher R-squares as compared to other weighting schemes (Hair et al., 2014). Additionally, In addition, Hair et al. (2014) suggested that bootstrapping technique should be applied to know the significance level of variables in reflective model. Generally, bootstrapping being a nonparametric technique can be used test whether coefficients such as outer weights, outer loadings and path coefficients are significant by estimating standard errors of the estimates.

In bootstrapping, subsamples are created with observations randomly drawn from the original set of data; the sample is drawn with replacement ranging from 500 to 5000 samples (Hair et al., 2014). In this view, the present study applied 5000 samples in bootstrapping to remain more relevant to the actual data. The path coefficients are measured via bootstrapping with an absolute value of *t*-statistics over ± 1.64 , ± 1.96 and ± 2.56 at 10%, 5% and 1% level of significance with two-tailed test respectively. The study used the maximum 5% level of significance with two tailed test throughout the analysis as an acceptance level to declare a relationship/path statistically significant. This assertion is commonly used or applied management sciences studies (Sarstedt, Ringle, Henseler, & Hair, 2014).

4.18 Predictive Relevance of Structural Models

It is important to mention here, the assessments of overall model fit such as goodness-of-fit indices, like covariance, based methods are not required for PLS-SEM (Chin, 2010; Hair et al., 2014). However in PLS-SEM, model validity is measured through predictive

relevance (Q-Squared). Generally, Q-squared values must be greater than zero for endogenous constructs in the structural model. Together with these resampling techniques, the Q^2 test, developed by Geisser (1975) and Stone (1974) is used to assess the predictive relevance of the endogenous constructs. This test indicates that how well observed values are reproduced by the model and its parameter estimates. Further, two types of Q^2 can be obtained in PLS-SEM, depending upon the form of prediction: first is called cross-validated communality and other is known as cross-validated redundancy (Fornell & Larcker, 1981). Chin (1998) recommended the later, to be used to examine the predictive relevance of the theoretical/structural model. In addition, it is argued that greater the value of Q^2 , higher the predictive relevance of the model. Whereas a Q^2 value less than or equal to zero suggest that the model lacks predictive relevance. Moreover, Q^2 can be applied in a model with reflective constructs only (Chin, 2010).

Following the guidelines of Hair et al. (2011, 2013), the study also relied on a blindfolding procedure to obtain the cross-validated redundancy as a measure to obtain predictive relevance of the study models (Q-Squared). The study represents the findings of structural models in accordance with hypothetical relationships are defined for the better understanding.

4.19 Hypothesis Testing:

Hypothesis 1

H1: There is relationship between ethical work climate and job stress among foreign workers in oil palm plantations.

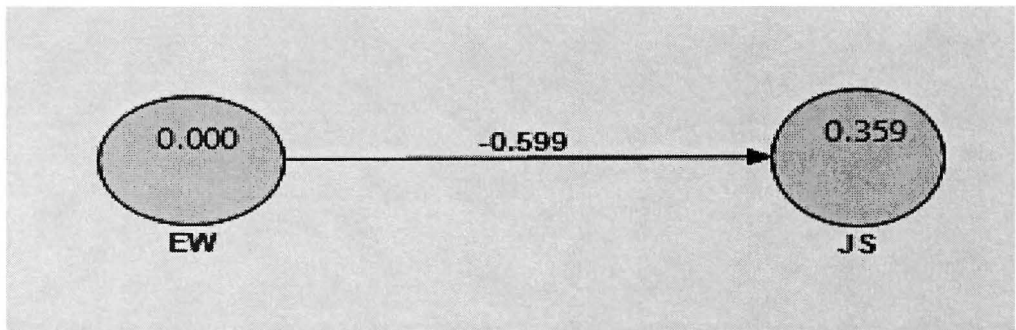


Figure 4.1 Hypothetical Relationships of Model 1

Table 4.14
Model 1

Hypothetical Relationship	Path Coefficient	Absolute t statistic value	Value of R ²	Value of Q ²
EWC→JS	-0.599	24.011	0.359	0.088
EWC	1.00	1.00		

Note: ***p value is significant at 1% level of significant

Table 4.14 divulges the results of the structural path based on model 2 under the conception of hypothesis (H1) of this study. This model shows the direct effect of ethical work climate on job stress factors as a single construct. The results indicate that there is direct relationship between ethical work climate and job stress factors, which is positive and significant at 1% level of significance. In addition, the overall validity of this structural model is also evident as Q-Squared value (i.e. 0.088) is above zero (see Table

4.14) providing the support that the ethical work climate is adequately predicting the endogenous construct. R^2 showed that ethical work climate explains the variance in project success factors more than 35.9% (0.359) having the stronger statistical power in parameter estimation (Hair et al., 2013). Eventually, hypothesis (H1) is also empirically supported.

Hypothesis 2

H2: There is relationship between psychological contract and job stress among foreign workers in oil palm plantations.

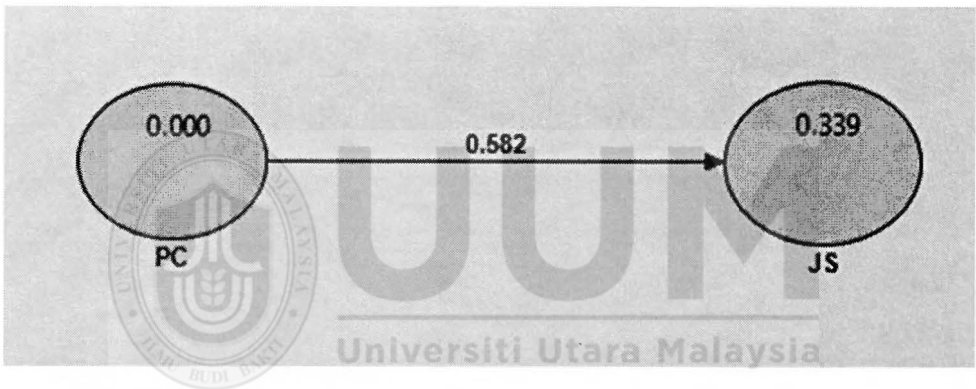


Figure 4.2
Hypothetical Relationships of Model 2

Table 4.15
Model 2

Hypothetical Relationship	Path Coefficient	Absolute statistic value	t	Value of R^2	Value of Q^2
PC→JS	0.582	16.539		0.339	0.073
PC	1.00	1.00			

Note: ***p value is significant at 1% level of significant

Table 4.15 divulges the results of the structural path based on model 2 under the hypothesis (H2) of this study. This model shows the direct effect of psychological contract on job stress factors as a single construct. The results indicate that there is direct relationship between psychological contract and job stress, which is positive and significant at 1% level of significance. In addition, the overall validity of this structural model is also evident as Q-Squared value (i.e. 0.073) is above zero (see table 4.15) providing the support that the project teamwork is also adequately predicting the endogenous construct. R^2 showed that project teamwork explains the variance in project success factors more than 33.9% (0.339) having the stronger statistical power in parameter estimation (Hair et al., 2013). Eventually, hypothesis (H2) is also empirically supported.

Hypothesis 3

H3: There is relationship between ethical work climate and intention to leave among foreign workers in oil palm plantations.

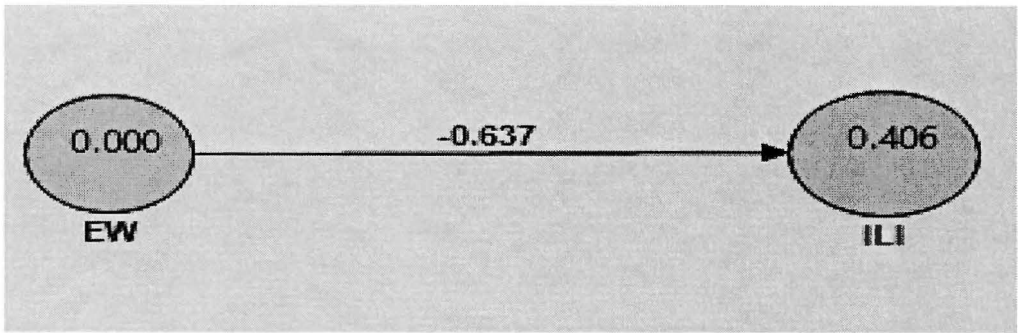


Figure 4.3
Hypothetical Relationships of Model 3

Table 4.16
Model No.3

Hypothetical Relationship	Path Coefficient	Absolute statistic value	t	Value of R ²	Value of Q ²
EWC→ILI	-0.637	22.519			
EWC	1.00	1.00	0.406	0.234	

Note: ***p value is significant at 1% level of significant

Table 4.16 reveals the results of the structural path of the model 3 based on the hypothesis (H3) of the study. The model shows the direct effect of ethical work climate on intention to leave. By examining both variables as a single construct in oil palm plantation settings, the results showed that the ethical work climate has a positive and significant impact on intention to leave ($p < 0.01$) shown in figure 4.3. In addition, the overall validity of this structural model is also evident as Q-Squared value (0.234) is also above zero, providing the support that ethical work climate adequately predicting the overall intention to leave. R² showed that ethical work climate behaviors may explain the intention to leave more than 40.6% (0.406) having the moderating statistical power in parameter estimation (Hair et al., 2014). To sum, hypothesis (H3) is also empirically supported.

Hyphothesis 4

H4: There is relationship between psychological contract and intention to leave among foreign workers in oil palm plantations.

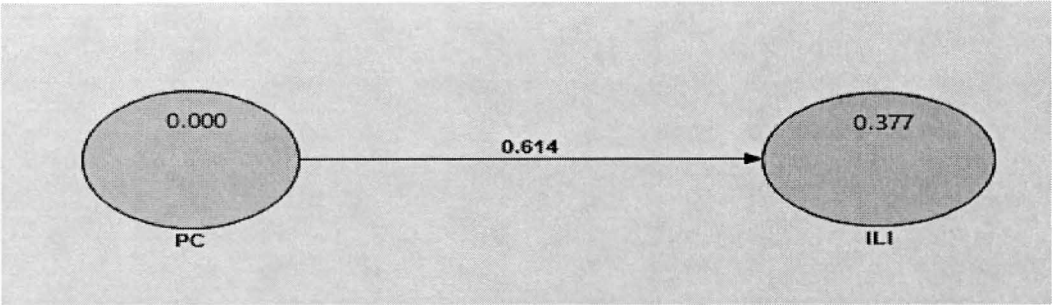


Figure 4.4
Hypothetical Relationships of Model 4

Table 4.17
Model 4

Hypothetical Relationship	Path Coefficient	Absolute t statistic value	Value of R ²	Value of Q ²
PC→ILI	0.614	19.068	0.377	0.214
PC	1.00	1.00		

Note: ***p value is significant at 1% level of significant

Table 4.17 divulges the results of the structural path based on model 4 under the hypothesis (H4) of this study. This model shows the direct effect of physiological contract on intention to leave as a single construct. The results indicate the direct relationship between physiological contract and intention to leave factors, which is also positive and significant at 1% level of significance. In addition, the overall validity of this structural model is also evident as Q-Squared value (0.214) is well above zero (see Table

4.17) providing the support that the project teamwork is also adequately predicting the endogenous construct. R^2 showed that project teamwork explains the variance in project success factors more than 37.7% (0.377) having the stronger statistical power in parameter estimation (Hair et al., 2013). Eventually, hypothesis (H4) is also empirically supported.

Hypothesis 5

H5: There is relationship between job stress and intention to leave among foreign workers in oil palm plantations

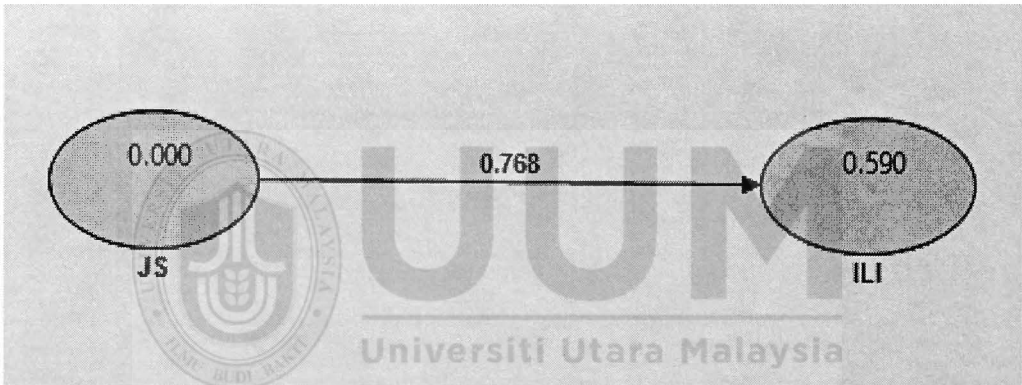


Figure 4.5
Hypothetical Relationships of Model 5

Table 4.18
Model 5

Hypothetical Relationship	Path Coefficient	Absolute statistic value	t	Value of R^2	Value of Q^2
JS→ILI	0.768	37.435			
JS	1.00	1.00		0.590	0.344

Note: ***p value is significant at 1% level of significant

Table 4.18 demonstrates the results of the structural path of the model 5 based on the hypothesis (H5) of the study. The model 5 is considered as one of the major analysis, showing the direct effect job stress and intention to leave factors as a single construct. The direct relationship showed that the predictor has significant and positive impact on predicting variable ($p < 0.01$) shown in figure 4.5. In addition, the overall validity of this structural model is evident as Q-Square value (0.344) is well above zero (see Table 4.18) providing the support that the jobs stress and intention to leave factors in Oil palm plantation Sabah. In other words, R^2 showed that job stress as a single construct explains the intention to leave factors 59% (0.590) having the stronger statistical power in parameter estimation (Hair et al., 2013). To sum it up, hypothesis (H5) is empirically supported.

In summary, the validity of structural models from 1-5 was verified, the Q^2 values for all of the models, were greater than zero, provided the evidence of predictive relevance with empirical support about the overall path models of the study. In addition, R-square of every model delivered a figure showing sufficiently amplification abilities of the independent variables to explain variance in the dependent variable of the study. Moreover, majority of the path coefficients were significant ($p < 0.01$).

4.20 Mediating Effect

This study intended to test two mediating hypotheses (H6 & H17). The results are presented diagrammatically in the coming section. To become more conservative to test the mediation, the overall mediator constructs have been introduced together in the model

6 (Figure 4.6) following the guidelines of (Preacher & Hayes, 2008). Nevertheless, all of the mediators remained significant.

Hypothesis 6

H6: Job stress mediates the relationship between ethical work climate and intention to leave among foreign workers in oil palm plantations.

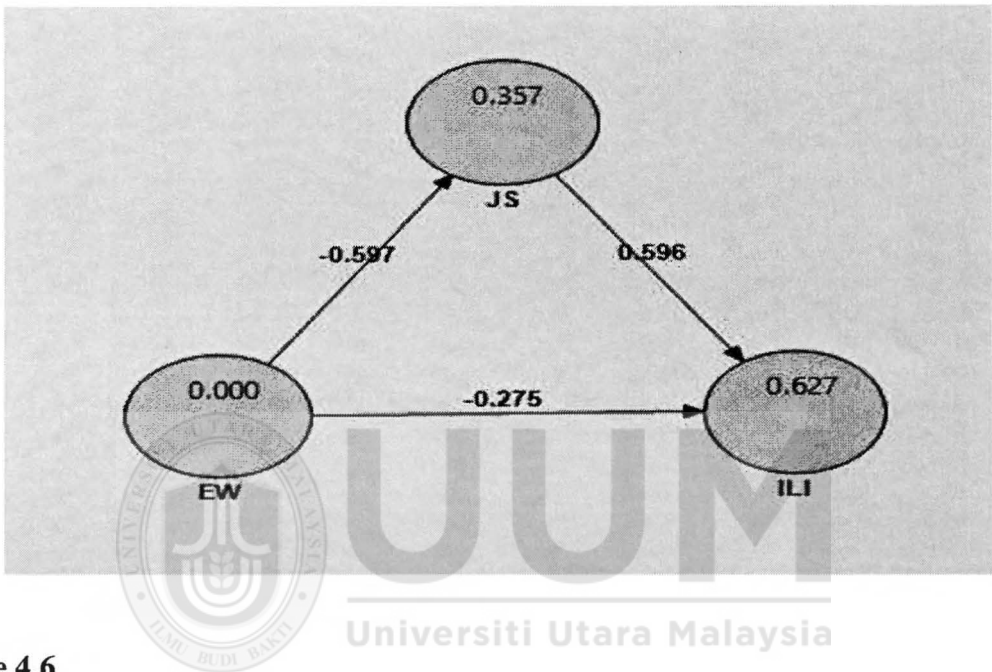


Figure 4.6
Hypothetical Relationships of Model 6

Table 4.19
Model 6

Hypothetical Relationship	Path Coefficient	Absolute value	t statistic	Value of R ²	Value of Q ²
H6:EWC→JS→ILI				0.627	0.365
EWC→ILI	-0.275	7.040		0.627	0.091
JS→ILI	0.596	16.654		0.357	
EWC→JS	-0.597	23.283			

Indirect effect (a)	$= -0.597 \times 0.596 = -0.356$
Direct effect (b)	$= -0.275$
Total effect (a+b)=c	$-0.356 + (-0.275) = -0.631$
VAF=a/c	$-0.356 / -0.631 = 0.564 \times 100 = 56.4\%$
Direct effect without mediation EWC→ILI	0.406

Note:***represent 1% level of significant

EWC-Ethical work climate, JS- Job stress, ILI- Intention to Leave,

After including the mediating construct of job stress between the relationship of ethical work climate and intention to leave factors (Model 6), it was found that ethical work climate has a positive and significant impact on job stress, which in turn has a strong and significant relationship with intention to leave factors. The indirect effect of ethical work climate (-0.356, $p < 0.01$) is also and significant (see Table 4.19). At the same time, after introducing mediator, the relationship between ethical work climate and intention to leave factors was dramatically reduced but still remained significant (Figure 4.6; path coefficient of 0.275, $p < 0.01$), with a Δ of -0.357, which is significantly lower when job stress was asserted in the relationship.

Further in PLS-SEM, Variance Accounted For (VAF) is used to validate a mediating relationship among the variables. According to Hair et al., (2014) a VAF value between 20% and 80% is considered partial mediation, VAF value less than 20% is considered no mediation and VAF greater than 80% is considered full mediation. In addition, Helm and Garnefeld (2010) argued that for partial mediation VAF falls between 0% and 100%, higher the value of VAF stronger the mediation. However, VAF is calculated as:

$$\text{VAF} = \frac{\text{Indirect Effect}}{\text{Total Effect}}$$

In this particular case, VAF value 56.4% validates the stronger partial mediating relationship of job stress between the ethical work climate and intention to leave factors (Hair et al., 2014) in oil palm plantation.

Subsequently, the job stress indicates that, in terms of mediation, keeps a significant amount of the total effect stems from the indirect path. In addition, after running the blindfolding procedure (Chin, 1998; Henseler & Chin, 2010) the values of Q^2 regarding ethical work climate and intention to leave (0.365 and 0.091) are found respectively, these are well above zero, confirming the predictive relevance of this path model. Hence, partial mediation of job stress is keeping empirical evidence for hypothesis H6.

Hypothesis 7

H7: Job stress mediates the relationship between psychological contract and intention to leave among foreign workers in oil palm plantations.

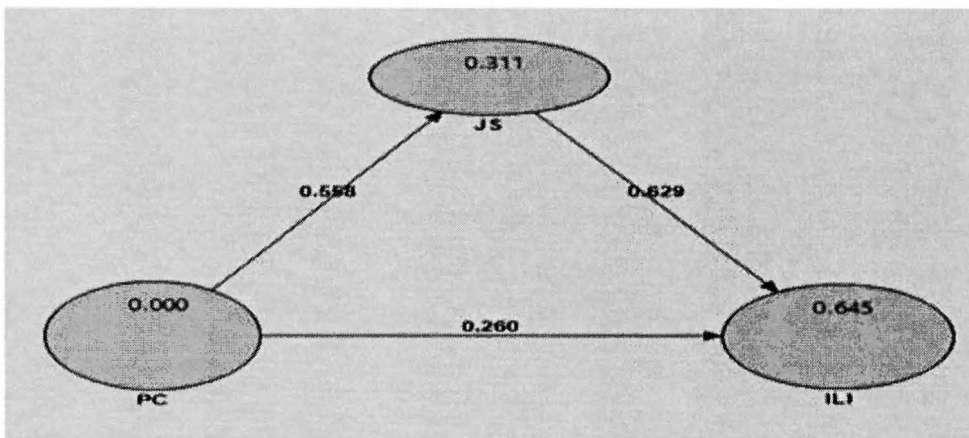


Figure 4.7
Hypothetical Relationships of Model 7

Table 4.20
Model 7

Hypothetical Relationship	Path Coefficient	Absolute statistic value	t Value	Value of R ²
H7:PC→JS→ILI			0.627	0.375
PC→ILI	0.260	7.178	0.627	
JS→ILI	0.629	20.504		
PC→JS	0.558	14.784		0.071
Indirect effect (a)	= 0.558*0.629=0.351			
Direct effect (b)	= -0.260			
Total effect (a+b)=c	0.351+0.260=0.611			
VAF=a/c	0.351/0.611=0.57*100 = 57%			
Direct effect without mediation PC→ILI	0.260			

Note:***represent 1% level of significant

PC-Physiological Contract, JS- Job stress, ILI- Intention to Leave,

After including the mediating construct of job stress between the physiological contract and intention to leave factors (Model 7), it was found that physiological contract has a positive and significant impact on job stress, which in turn has a strong and significant relationship with intention to leave factors. The indirect effect of physiological contract (0.351, $p < 0.01$) is also positive and significant (see Table 4.20). At the same time, after introducing mediator, the relationship between physiological contract and intention to leave factors was vividly reduced but still remained significant (Figure 4.7; path coefficient of 0.26, $p < 0.01$), with a Δ of 0.351, which is significantly lower when job stress was asserted in the relationship. Moreover, in PLS-SEM, Variance Accounted for

(VAF) is used to validate a mediating relationship among the variables. According to Hair et al., (2014) a VAF value between 20% and 80% is considered partial mediation, VAF value less than 20% is considered no mediation and VAF greater than 80% is considered full mediation. In addition, Helm and Garnefeld (2010) argued that for partial mediation VAF falls between 0% and 100%, higher the value of VAF stronger the mediation. However, VAF is calculated as:

$$\text{VAF} = \frac{\text{Indirect Effect}}{\text{Total Effect}}$$

In this particular case, VAF value 57% validates the stronger partial mediating relationship of job stress between the physiological contract and intention to leave factors (Hair et al., 2014) in oil palm plantation. Subsequently, the job stress indicates that, in terms of mediation, keeps a significant amount of the total effect stems from the indirect path. In addition, after running the blindfolding procedure (Chin, 1998; Henseler & Chin, 2010) the values of Q^2 regarding job stress and intention to leave (0.375 and 0.071) are found respectively, these are well above zero, confirming the predictive relevance of this path model. Hence, partial mediation of job stress is keeping empirical evidence for hypothesis H7.

4.21 Structural Model

In this section, the result of the structural model and tests of hypotheses for this study will be presented. Following Hair et al.(2011; 2012), this section is concerned using the standard bootstrapping process with a number of 5000 bootstrap sample on 497 cases

to assess the importance of the path coefficients. Using the PLS bootstrapping output, the moderation effects of organizational culture will be calculated.

Figure 4.6, figure 4.7 and table 4.19 and table 4.20 illustrates the estimation for the full structural model. To understand the relationship between the constructs, SEM-PLS structural model analysis was conducted. The contribution of each construct of the exogenous variable is represented by the standardized beta values within the PLS structural model (Chin, 1998).

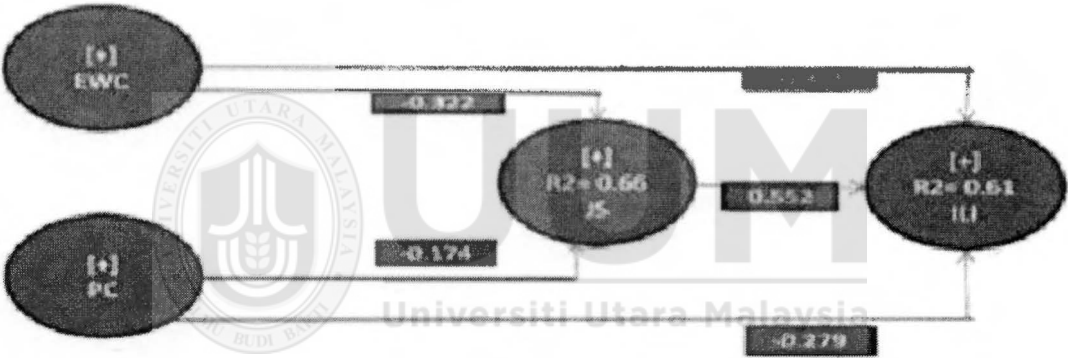


Figure 4.8
Theoretical Framework Direct Effect

Table 4.21
Direct Effect

Hypothetical Relationships	Path Coefficients	Absolute <i>t</i> -statistical value	Value of R ²	Value of Q ²
EW → JS	-0.322***	5.260		
PC → JS	0.174***	2.574		
EW → ILI	-0.351***	5.258		
PC → ILI	-0.279***	3.760		
JS → ILI	0.766***	34.365		
JS	1.00	1.00	0.659	0.647
ILI	1.00	1.00	0.61	0.596

Note: *** p value is significant at 1% level of significance

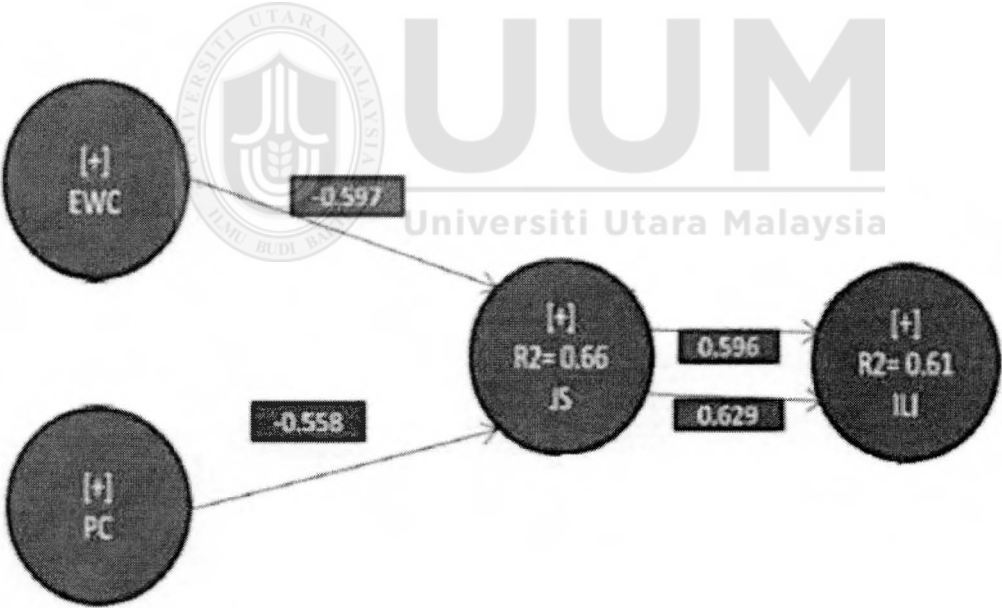


Figure 4.9
Theoretical Framework Indirect Effect

Table 4.22
Indirect Effect

Hypothetical Relationships	Path Coefficients	Absolute <i>t</i> -statistic value	Indirect Effects (a × b) = c	Direct Effect of overall model (d)	Total Effect of overall Model	VAF c/d	Value of R2	Value of Q2
Ha	EWC→JS (a)		-0.597***	23.283	-0.356	-0.275	0.627	0.365
	JS→ILI (b)	0.596***	16.654					
Hb	PC→JS (a)		0.558***	14.784	-0.351	0.260	0.645	0.375
	JS→ILI (b)	0.629***	20.504					
Total Effects			0.139	0.274	0.413	0.34	0.610	0.594

Note: *** p value is significant at 1% level of significance

Important criterion for assessing the structural model in PLS-SEM is the *R* squared value, which is also known as the coefficient of determination (Hair et al., 2011, 2012; Henseler & Fassott, 2010). The *R*-squared value represents the proportion of variation in the dependent variable(s) that can be explained by one or more predictor variable (Elliott & Woodward, 2007; Hair et al., 2010, 2006). Although the acceptable level of *R*2 value depends on the research context (Hair et al., 2010), Falk and Miller (1992) propose an *R*-squared value of 0.10 as a minimum acceptable level. Meanwhile, Chin (1998) suggests that the *R*-squared values of 0.627, 0.645, and 0.610 in PLS-SEM can be considered as substantial, moderate, and weak, respectively.

In particular, a cross-validated redundancy measure (*Q*²) was applied to assess the predictive relevance of the research model (Chin, 2010; Geisser, 1974; Hair et al., 2014; Ringle, Sarstedt, & Straub, 2012; Stone, 1974). The *Q*² is a criterion to a measure how well a model predicts the data of omitted cases (Chin, 1998; Hair et al., 2014). According to Henseler and Fassott (2010), a research model with *Q*2 statistic (s) greater than zero is

considered to have predictive relevance. Additionally, a research model with higher positive Q^2 values suggests more predictive relevance.

The table 4.21 and 4.22 clearly indicates the predictive relevance of the model generated in this research. This particular study has posed 7 hypotheses involving the direct and indirect analysis. The direct analysis was related to 5 hypothesis, based on three research questions and the indirect analysis was based the last research question related to 2 hypothesis. The composite model which has come out the overall analysis indicates that the entire hypothesis considered for the study is well accepted.

Table 4.23 *Summary of Hypotheses Testing*

Hypotheses	Decision
H1: There is direct relationship between ethical work climate and job stress among foreign workers in oil palm plantations. H1: EWC→JS	Supported
H2: There is direct relationship between psychological contract and job stress among foreign workers in oil palm plantations. H2: PC → JS	Supported
H3: There is direct relationship between ethical work climate and intention to leave among foreign workers in oil palm plantations H3: EWC→ILI	Supported
H4: There is direct relationship between psychological contract and intention to leave among foreign workers in oil palm plantations. H4: PC→ILI	Supported
H5: There is direct and positive relationship between job stress and intention to leave among foreign workers in oil palm plantations.	Supported

H5: JS→ ILI

H6: Job stress mediates the relationship between ethical work climate and intention to leave among foreign workers in oil palm plantations.

Supported

H6:EWC→JS→ILI

H7: Job stress mediates the relationship between psychological contract and intention to leave among foreign workers in oil palm plantations.

Supported

H7:PC→JS→ILI

4.22 Summary

The detailed description of the results of the data collected in this study was presented in this chapter. Following the series of analysis conducted in this study, a convergent validity was confirmed through the loading and the cross loading of the data set. Discriminant validity test was also conducted by using the Fornell-Larcker criterion and it was confirmed that discriminant validity was achieved. This chapter further covered the measurement as well as the structural model through the use of SmartPLS 3.0 (Ringle et al., 2005). The chapter also covered the testing of the various hypothesis and presented all the findings accordingly. In all, the five direct hypothesis tested in this study proved significant and the two indirect hypothesis further supported at 1% significance level.

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.0 Overview

This chapter discusses the result of the research under 6 objectives. The aim of this research is to get better insight into the working and living condition of the oil palm workers especially foreign workers and their level of job stress and intention to leave oil palm plantations. The decisive objective of this research was to explain why there are workers intention to leave the oil palm plantations and why the plantations have to employ foreign workers more to do their oil palm business, especially in the Sabah region of Malaysia. This study explains the ways worker's intention to leave is connected to several supportive factors which are unique in oil palm plantations like ethical work climate and psychological contract of workers in the oil palm plantation. Subsequently this chapter represents the discussion related to findings and implication of the study that will support to have a better recommendation for policy makers, plantation management, and non-government organization for the responsible and sustainable oil palm plantation operation in Malaysia.

5.1 Discussion of results

This section shows a discussion of the study result of the factors contributing to foreign worker stress and their intention to leave an oil palm plantation in Sabah region Malaysia that focuses mainly achieving the main objectives of the study.

5.1.1 The level of ethical work climate, psychological contract, Job stress and Intention to leave.

Research Question 1

- What is the level of ethical work climate, psychological contract, Job stress and Intention to leave?

This particular study was undertaken to establish the relationship between ethical work climate and psychological contract in its influence on job stress and intention to leave among workers in oil palm plantations. Before establishing this relationship the study has posed the first research question related to the level of ethical work climate and psychological contract among workers. The result clearly pointed out lower level of ethical work climate and psychological contract among the oil palm plantation workers in the Sabah region of Malaysia.

This particular study has well in cooperated in the literature part argumentative that there is precarious working and living conditions in relations to the nature of work and their stay in oil palm plantation especially among foreign workers. Workers in oil palm plantations are often found working and living in a remote area within closed plantation complexes, or they are otherwise segregated from larger communities. Workers are completely at the whim of plantation owners or managers, whose major concern it is to maximize productivity, often at by making provision of reasonable working and living conditions and compromising the rights of plantation workers (Amnesty International, 2010). Unfavorable and poor working conditions are cited as a major reason for high turnover intention among workers (Negrin & Tzafrir, 2004). The working and living

conditions of these foreign workers need to be correlated with the people management issues prevalent in the oil palm plantations.

Attrition of workers is one of the manifestations of the worker's intention to leave from the plantation jobs, though, which is hidden and closely knit with their motivation and expectations. One of the direct effects of unfair working and living condition of workers in the plantation relates to the intention to leave from the plantation (Amnesty International, 2010). These clearly explain the unethical work climate prevalent in the oil palm plantation. the lower mean score result of this particular result further substantiating the result of Amnesty International that unethical work climate closely link to working and living conditions of foreign workers.

It is quite easy to connect the low level of ethical work climate with psychological contract between the workers and the managers. Making provision of poor working and living condition for sure a strong indicator leading to poor psychological contract. When worker in the organization feels that organization is not delivering what is promised, this cause reduced satisfaction, and can lead them to leave the organization, neglecting their work and so on (Turnley & Feldman, 1999). The effect of poor psychological contract may in the long-term lead to poor labor management relations and it further affects the business operations of plantations as a whole. Several researchers have reported issue related to employment contract, statutory and non statutory well fare provision, poor wages, etc. like allied issue are sustaining poor level of psychological between workers and managers. It is generally, inferred in this context that if the responsibility relating to

the psychological contract are breach, workers may suffer decline in certainty related to their employment and mental contract between the workers and management.

Almost similar result observed in job stress as well as workers intention to leave from oil palm plantation. The study clearly indicated that there is high level of job stress workers intention leave from oil palm plantation. The foreign workers from Philippines and Indonesia have come to oil palm plantation of Malaysia with the prime objective of getting good income with which they try to reduce their poverty level. They expect decent working and living condition inside the plantation. Several job related factors are leading to job stress among workers which include poor wage, poor welfare facilities, insecure and unsafe working condition, role conflict, role ambiguity, feeling of inequality, ethnic conflict, poor labor management relation etc. the theoretical model adopted by this research viz job demand and resource theory also support the high level of job stress in connection with job characteristic and the difficulties in association with resource.

Work related stress is a topic of research in relation to several factors which are individual as well as organizational. Many factors prevalent in the organizations leading to workers stress correlating the perception of workers towards the ethical work practices. The above discussion clearly indicates that the sector of oil palm having the job characteristics related precarious working conditions and several unethical labor practices inclusive of human rights violation causing workers stress at work. The above discussion does substantiate the result of this research viz high level of job stress among oil palm plantation. The research question also address the level of workers to leave from oil palm

plantation. Obviously all the above discussion in relation to unethical work climate, psychological contract and job stress clearly indicate the precarious working and living condition prevalent oil palm plantation. It is quite natural to assume that if those determinants in relation to job stress is existing in any of the organization or specially in oil plantation one would be able to think about higher level workers intention to leave from oil palm plantation.

Several variables that have been studied have also been associated with worker's intention to exit. Many scholars tend to link job fulfillment with workers turnover e.g. disgruntled workers are likely to abandon their job more frequently than content workers (Churchill, Ford & Walker, 1974). Porter and Steer (1973) recommended that workers and organizational level variables should be incorporated because it decides the workers' conduct and thought that influence their decision either to quit or remain in the organization. However, most of the studies concur that efficient dedication has convinced an adverse effect on the worker's intention to quit the organization (Conway & Monks, 2009). Intention has been identify as the major factor leading to actual behavior of quitting the job. the study result assess the level of intention to leave to ascertain the alter mate effect which is actual quitting.

5.1.2 The relationship between ethical work climate and psychological contract

leading Job stress.

Research question 2

- Do ethical work climate and psychological contract have any relationship with job stress of workers in oil palm plantation?

Based on the current result of the study and in line with the International Labor Organization (ILO, 2004) report in every agricultural work the worker in the oil palm plantations suffer unsafe working conditions. These working conditions aspects include long working hours, manual tasking, work injuries, sicknesses, poor remuneration, casual or verbal contract and limited social security. Such working conditions scenario is also knit with the poor living environment, in the form of poor accommodation facilities, lack of adequate food and safe drinking water, poor transportation facilities and unpleasant labor management relations.

The working and living condition of foreign workers in the oil palm planation is categorically deplorable in nature. Several factors are coming into the picture when we discuss the working conditions like low wage, forced labor, lack of safety and security, physical abuses, rigid rules and regulations, long working hours, which is combined with several living condition aspects like remote location, poor drinking water facilities, poor housing facilities, lack of transportation facilities, lack of children education facilities, social disengagement, indebtedness and stateless condition of workers. The result of the present study indicates that the workers have a

low level appreciation towards all these factors mentioned above indicating its relationship with the job stress (Bhatti, Hashmi, Raza, Shaikh, & Shafiq, 2011).

A report coming from Jakarta Post (2008) is almost in line with the present findings. The report indicates that the workers in the oil palm plantations have poor working condition and they are existing with bare minimum facilities and to a great extent in dilapidated condition devoid of any ethical work climate, due to remote habitation and allied vulnerable condition. The workers are forced to live in absolute poverty, lack of access to hygienic water, electricity as well as other important facilities. Besides, they are segregated or cut off from enjoying social support, culturally barricaded as well as unfairly treated (The Jakarta Post, 2008).

The present finding is also almost in line with the definition of 'precarity' given by Vosko (2010). The "precarious work" can be described as a result of employments characterized by insecurity, low wages and insufficient social supports and constitutional privileges. Precarious work is often guided or symbolized by the relationship between work form (i.e. self or paid job), type of job (e.g. short-time or full-time, part-time or full-time) and aspects of employment insecurity, as well as social setting (e.g. profession, industry, and geography) and societal stance (or the relations between social relations, such as gender and legal and political groups such as citizenship). Several 'precarity' factors on laborers are associated with the working and living conditions in oil palm plantations, like low level social support, lack of plantation management support and government support. Work stress is affected directly or indirectly through these stress sources.

When we closely look into the wage of workers working in oil palm plantations, it is observed that workers are merely supported by a pay system either with very low daily wage or pace rate (particular for harvester) which develop high insecurity on workers life in the oil palm plantations, leaving a decision to move away from such jobs. The wage outcomes in the oil palm plantations are subjected to the factors like weather, terrene or seasons. During off seasons of the wage will be disappointing when the quantity of Fresh Fruit Bunches (FFB) is less. The wage system is highly disappointing to the workers working in oil palm plantations, relating the concept of precarious working conditions with high job stress. (Bissonnette, 2012).

Verité research (2012) also supports the present research finding that a number of labor risks factors are associated with the working and living conditions in the oil palm sector. These risks included unethical recruitment and hiring practices; indicators of forced labor; wage and hour violations; and added issues, such as violations of women's rights, unacceptable living conditions, environmental damage, and a lack of grievance mechanisms.

Lack of mechanization possibilities inviting extreme labor intensive work in the oil palm plantation activities is also another causative factor leading to workers intention to choose other job opportunities. Specifically, when we look into mechanization option regarding labor intensive for the overall important activities like land preparation, nursery, planting, organic manure, pasture up keep, preservation, harvesting, gathering and transportation. They are all followed with traditional and

conventional labor practices which are physically demanding and mentally tensing. The workers intention to leave is then clearly related to the unique nature of work, the job demands and the inadequate resources available to perform the work, which develops job stress among the workers in the oil palm plantations.

On an another note, as it is pointed out, the local workers not ready to engage oil palm activities due to the nature of the job which is dirty, dangerous and distance. The psychological status of workers working in oil palm planation is neither in tune with a decent working condition nor with appropriate living conditions. (Normala, Kumar, & Sriramalu, 2014).

These observations are well supported by the research conducted by Verite, (2012). The report indicates that the palm oil industry indemnified with long working hours, tough manual labor and little pay. The research further specified that there is insensitive and often harsh living condition without basic shelter, little defense from environment with no access to portable clean water, no electricity or regulated electricity, no health facilities. These indicate the precarious condition of employment in the oil palm plantation which is leading to high emotional stress and psychological disorder. When discussed, these findings in relation to the work they perform in an oil palm plantation, major activities are leading to a high level of job stress.

The empirical evidence from the studies shows that the significant negative and direct relationship between ethical work climate and job stress. It is found that H1 is supported in the studies which mean that ethical work climate has the significant

negative relationship with job stress. This particular observation is almost similar with several past findings (Accenture, 2012; Rainforest Action Network, 2013; Verite, 2012). The findings of current studies implied that the lower the ethical work climate in plantation organizations higher the job stress will be.

Following the observations which are made by several researchers (Hart & Cooper, 2001; Kahn & Byosie, 1992) from the manufacturing sector, in oil palm sector also similar observation acknowledged. This indicates that the findings are broadly applied in relation to an ethical standard and its effect on job stress and worker wellbeing. Past studies have examined several sectors also taking into account workers role, specific workload and aspect of the manual job situation (Hart & Cooper, 2001; Kahn & Byosie, 1992). The nature of work thus is related to job stress in oil palm plantations.

There are several descriptions detailing the unethical work climate in oil palm plantations substantiating the present findings. Work on oil palm plantations is primarily carried out by unskilled workers. Due to their isolation, most estates hire temporary workers during peak harvest and are reliant on outsourced labor. Labor brokers on company payrolls often lure men, women, and children with enticing offers of high wages, easy work, and promising living conditions (Accenture, 2012). Children have also fallen victim to the numerous labor rights violations within the palm oil industry, spurring the U.S. Department of Labor to list palm oil as one of the worst offenders of forced and child labor (Rainforest Action Network, 2013).

Furthermore, on the above deliberations, this particular study is also in line with the study conducted by Verite in 2012. The study reports details of several human right violation and labor risks associated with oil palm plantations such as unethical recruitment and hiring practices; indicator of force labor; wage and hours violations; and other issues such as child labor, violation of woman right, unacceptable living conditions and lack of grievance mechanisms and the workers are exposed to a form of modern slavery in oil palm plantation (Verite, 2012; Accenture, 2012).

These unethical practices are a form of injustice faced by workers in the oil palm plantations. It has been pointed out that the workers are subjected to a higher level of human injustice in the form of distributive, plural and interactions leading to dejection and psychological weakness (Tepper, 2000). In correlation with the above discussion Elovainio, Kivimaki and Helmakah (2001) pointed out that both procedural and relational justice are connected to occupational strength which is developed out of anxiety, despair, and loss of focus.

Being in a remote location is one of the major disadvantages of these oil palm foreign workers since their problems are not well cited by any researchers or by the government authority. Their remote habitations are far away from the basic human amenities like proper housing facilities, proper drinking facilities, safety and security at work place and etc. Since these foreign workers are not under the muster role of oil palm plantations, there is no formal contract exiting between workers and the management. Under this circumstance, foreign workers are under the caprice of plantation holders or managers whose main concern is to regularly take full advantage

of their productivity at the detriment of reasonable working and living condition thereby ignoring their basic needs. In addition to this insecure unethical work climate, which is also accelerated by keeping the workers passport either with the workers or plantation manager, making these foreign workers more dependable to the prevalence system totally controlled by the “mandor” (supervisor) and the plantation managers with no proper working and living condition? The flexibility for the estate manager translates into insecurity for the foreign workers and this leads to workers stress at work.

Substantiating the hypothesis formulated and the deliberation made, job stress is well identified with the unethical work climate. Workers in the oil palm plantations have poor working condition and they are existing with minimum facilities and with to a great extent in dilapidated condition devoid of any ethical work climate, due to remote habitation and allied vulnerable condition. The workers are forced to live in abject poverty devoid of access to hygienic water, electricity as well as other important facilities. Besides, they are segregated or cut off from enjoying social support, culturally barricaded as well as unfairly treated (Jakarta Post, 2008).

Contextualizing the topic to the sources of job stress, this particular study connects numerous working and living factors of oil palm plantation foreign workers. This job stress factors are closely knit with the working and living conditions which are to be termed as precarious and well connected to unethical work climate. The past literature and the present findings thus clearly substantiate unethical work climate and its relations with job stress.

Theoretically, the outcome of the study provides empirical evidence of direct influence of the psychological contract on job stress among foreign workers in oil palm plantation. It is found to have a negative relationship between psychological contract and job stress among foreign workers. Thus, the hypothesis H2 of the study is supported. Past studies have verified this relationship viz psychological contract and workers job stress (Robinson & Rousseau, 1994; Gakovic & Tetrick, 2003). The lower the psychological contract between workers and the managers, the higher the worker's job stress will be.

The most imperative factor a worker anticipates from the top level management is a congenial working environment which ensures better pay packages, safety & security and a decent living condition. As discussed, majority of workers in the oil palm plantations are from Indonesia and Philippines, in the Sabah region of Malaysia. These workers are often migrating to Malaysia oil palm plantation works, in order to afford a better standard of living for their family members. These migrated foreign labors are found in remote locations in the oil palm plantations whom are cut off from all social life. The laborers are surrounded by mandors and other government officials who have direct influence on these foreign laborers activities. Further, the laborers are totally under the whims and fancies of plantation owners or managers who's have seldom any interest to ensure proper living and working conditions. Their objective is to maximize the productivity even at the expense of providing minimum living conditions. Unfortunately, this situation leads to a low level of psychological contract between workers and plantations management, leading to a higher level of stress.

This discussion is almost in line with research conducted by Verite (2012), which indicates that oil palm mainly encompasses high potential for exploitation resulting from segregation of oil palm plantations. The precise occurrence of forced labor in the oil palm is unknown, predominantly due to trafficking in Malaysia which is known to be common. The report from NGOs, Amnesty International (2010), indicates that the working conditions of foreign workers in medium and small holding plantations are highly pitiable and devoid of basic amenities, and living conditions. The psychological contract between foreign workers and plantation owners is the resultant outcome of mutual understanding, respect and reflection of the harmonious relationship between the two. When one conceptualize understanding related to the psychological contract in oil palm plantations, the scenario need to be evaluated with due consideration to precarious working conditions. As it is discussed in the two hypotheses above, a low level of psychological contract exists between the workers and oil palm plantation management. Resultant manifestation may be in the form of job stress.

The small and medium oil palm plantations are not following rules and regulation stipulated by the government that ensures proper working and living condition to the foreign worker's in the oil palm plantation in Sabah. There are a violation of rules and regulation and a high level of expectation mismatch between the workers and the management in relation to wage, safety & security, housing facilities, transportation facilities, in nutshell ensuring proper working and living to the workers. This

indicates that the workers working in the oil palm plantation might have felt a form of breach in psychological contract leading to job stress among workers.

Substantiating this argument and this discussion based on the observation made in the research as well as the past literature cited by Lambert, Hogan and Barton, 2001; Thau, Bennett, Mitchell and Marrs, 2008 ; Robinson, Kraatz, and Rousseau, 1994 indicates that when worker perceives there is breach in psychological contract, they experience stress. If there is violation of the psychological contract, it will damage the rapport between the workers and their employer; it will also reduce the job satisfaction of the workers, as well as lower their commitment with the organization, leading to greater opportunity of workplace deviance. If workers sense that they are not going to get the benefit what was pledged, they will respond by not fulfilling his obligations i.e. he will show workplace deviant behavior. If a worker feels he is not treated fairly and according to the perceived agreement at the start of the job, he shows workplace deviant behavior.

The above discussions and deliberation of the direct hypothesis clearly indicate the oil palm plantation in Sabah region of Malaysia seldom follow the rules and regulation stipulated by the government and there is a high violation of work ethic and as well as human rights. As it is pointed out by Ambrose, Arnaud and Schminke (2008), when a worker feels he or she did not get his or her expectation, it is perceived it to be injustice. Supporting Appelbaum, Deguire and Lay, 2005; Ambrose et al., 2008; Litzky, Eddleston and Kidder, 2006 clearly indicated that when a manager dashes the

hopes of the worker, it prompts organizational abnormal conduct in the workers. A feeling of unjust dealing also raises chances of workplace deviance among workers. Breach of the psychological contraction was associated with an increase in work pressure (Gakovic & Tetrick, 2003).

It is well noted by the researchers (Kirkhorn, Earle-Richardson, & Banks, 2010; Davis & Kotowski, 2007) in the past that generally in oil palm plantations and the laborers are widely neglected by the authorities, since the non-availability of the workers in the plantations and the operations are far away from mechanization application. Availability of casual laborers from the poverty ridden neighboring countries like Indonesia and Philippines, make the plantation operations more cost effective, even in comparison with any possibility to mechanize the process. Bending up and bending down, loading and unloading, fast and repetitive motions, etc., develop high physical and psychological stress.

In line with the observations made in the study, like high physical and mental work pacing of workers in oil palm plantations and further in correlation with the past observations pointed out by some researchers (Ng et al., 2013; Bernard, Putz-Anderson, & Burt, 1997; Fathallah, 2010) it is deliberated that in the oil palm plantations the plantation work is more labor intensive. It is equally reported that in the initial stages of harvests, a fresh fruit bunch cutter can have about 5kg weight on the average. Moreover, the age of the tree determines its weight and size. The advancement of the tree is related to FFB of the oil palm tree at >15 years old weighing as much as 50kg. The study by Ng, Bahri, Syah, Mori and Hashim (2013)

identified that fresh fruit bunches cutter go through position problem because of discomfited positions and bending down. It has been revealed that the lower back, upper back, hands and arms of the workers are badly damaged during the period of harvesting because of the type of work. Besides the above, the locomotive apparatus illness among others (Bernard et al., 1997) is popularly associated farming methods which involve serious works and tasks in the way of many ergonomic risk factors. Such observations support the present findings that the oil palm plantation work is stressful considering the resources available to the workers in general and the nature of the job demanded.

Baron, Milliron, Habes and Fidler (1991) rightly pointed out in this context that probabilities for injuries and disabilities are quite common with lifting of heavy material and since it requires them to squat, bend, kneel, and twisting. Harvesting and collection of FFB work is hard work, and plantation workers feel the pain. Plantation worker suffers backaches and aches on their shoulders, arms, and hands above other health challenges. The wounds that instigate them to skip jobs include sprains and injuries, and a quarterback injuries. Apart from that, there are equally general causes responsible for disability (Baron et al., 1991). Looking at the nature of job, and the way they have to handle the work equipment's provided by the plantation management to the workers, it is clearly inferred that the resources available to the workers and the nature of job is taxing to them and develop stress and strain among the workers in oil palm plantations.

The resultant manifestations of the ergonomic issues in the oil palm plantation works include high physical stress. When we look at the lifting activity, it is incomparable with other tasks performed in the oil palm plantations, since it is done repetitively. It has shown the body part that could be severely disturbed at harvesting stage includes lower back, upper back, hands and arms as a result of the type job and job prerequisite. Subsequent submission on the damages or challenges of the locomotive apparatus, Musculoskeletal Disorders (MSD) or work-related musculoskeletal disorders among others (Bernard, Sauter, Fine, Petersen, & Hales, 1994) are generally related to agricultural traditions which are corroborated with thorough labor-intensive work tasks in the form of many ergonomic risk variables (Fathallah, 2010). These researches can be related to the collectors of harvested fruit bunches. For pushing factors that determine how much force will be exerted are handle orientation, handles height, tyre diameter and the posture while pushing (Hoozemans, Slaghuis, Faber, & van Dieën, 2007; Kotowski, Davis, & Waters, 2009b; Lin, Chen, Wei, & Wang, 2010). With worse conditions in the oil palm plantations, results can be expected to be of a greater magnitude of the force exerted by muscles, Electromyogram (EMG) readings, and moment on the L4/L5 section of the spine and other variables that are studied.

Due to the inhabitation in remote locations, the oil palm workers are also swayed by organizational, psychosocial and personal risk factors. A feeling of organizational rejection, psychosocial issues and personal hygiene factors can lead to numerous ergonomics issues like Musculoskeletal Disorders (MSD). Some of the research

findings in the agricultural field (Bernard et al., 1994; Sesto, 2000) are also in line with the above arguments, in the light of present research findings. Agricultural production is generally linked with a high occurrence of ergonomic damage or harm, mostly during the period of rigorous traditional labor and harvesting.

Substantiating the above discussion, it is reported by these researchers that harvesters in the oil palm plantations could also be influenced by different cultural, organizational, psychosocial and personal risk factors especially in a place that houses migrant labor, home-sickness, health and family socioeconomic welfare, smoking habit and overweight may boost chances of contacting a Musculoskeletal Disorders (MSD). Past studies have identified these risks factors to be strongly related to Musculoskeletal Disorders (MSD) (Bernard et al., 1994; Sesto, 2000). As it is pointed out in the above discussion, the oil palm sector is having the job characteristics of labor intensive work, physical hazards and stress at work is assumable.

5.1.3 The relationship between ethical work climate and psychological contract leading to intention to leave.

Research question 3

- Do ethical work climate and psychological contract have relationship with intention to leave among workers in oil palm plantation?

The Malaysian palm oil industry is labor-intensive. Migrant workers from Indonesia and Philippines largely make up the plantation-based workforce in order to earn better

income or a more consistent work than in their home countries. The plantation workers frequently, migrate in order to cater for their relatives and neighbors back home, subject to the pay they received. Oil palm workers are regularly found residing in an isolated environment surrounded by plantation, or they may be separated from the larger societies. In such situation, the workers are totally controlled by the plantation owners or their managers whose major interest is to make best use of productivity at the detriment of sensible working and living conditions and the right of plantation workers. When the workers face this type of condition, the worker has limited alternative than to quit the plantation. Nevertheless, workers have no opportunity to leave the plantation because of the close nature of the plantations (Amnesty International, 2010).

Justifying the present finding and the above deliberations on the precarious working conditions, several researchers reported that safety, security etc. are prominent factor for worker's intention to stay back or quit the job. Quitting the organization in search of more secure opportunities is common among workers who feel insecure about their jobs (Ashford, Lee, & Bobko, 1989). Unmannerly behavior by a worker's superior can be a nerve wrecking incident. A study by Tepper (2000) revealed that several ill-effects; lessen their dedications to the establishment, work and life displeasure, job and private disagreement and many kinds of psychological health conditions. According to Holm and Hovland (1999), job uncertainty is a product of an amplified worker turnover rate.

The present findings indicate further that the worker's intention to quit is very high in oil palm plantations, substantiating the results of United States Department of Labor (USDOL), 2012 and the Amnesty International (2010) researches. The report indicates that the plantation management exploits the socio-economic conditions of the foreign workers, and by making provision of exploitative working and living conditions, which are almost devoid of ethical work climate. The workers are uncertain about their work in the oil palm plantations. A majority of workers are in search of alternative employment opportunities. Consequently, foreign worker's intention to leave plantations is an attitude based on improper and impoverished working and living conditions existing in oil palm plantations.

Poor accommodation facilities, lack of safety and security work, remote habitations, poor welfare facilities, maltreatment in organizations, poor wages, child labor, etc are all well connected with worker's intention to leave oil palm plantations. Contextualizing the topic to the welfare conditions, C.B. Mamoria and S. Mamoria (1980), rightly pointed out that workers welfares affect their attitude and promote the continuation of industrial tranquility. Workers' well-being is therefore, one of the main factors of work interactions. Besides better optimism and devotion, benefits are of importance to trim down truancy and worker turnover in an organization. Contextualizing the Malaysian oil palm sector, though very little information is available. Based on the present findings it is well deliberated that there is the presence of precarious working and living conditions which lead a foreign worker to leave the oil palm plantations.

The empirical evidence from the studies shows that the significant negative and direct relationship between ethical work climate and workers intention to leave. It is found that H3 is supported in the study which means that ethical work climate is the significant negative factor responsible for worker's intention to leave. This particular observation is almost similar with several past findings (Ambrose et al., 2008; Sims & Kroeck, 1994). The findings of the current study indicate that the lower the ethical work climate, the higher the stress. Similar observations are widely rampant in manufacturing and service sectors. Following those observations, similar characteristics of unethical work climate were also identified in the oil palm sector. This indicates that the general findings apply to ethical standard in relation to worker's intention to leave are well associated with worker's wellbeing and working and living conditions. Past studies have examined several factors, also taking into account workers working and living conditions and facts of the manual job situation (Hart & Cooper, 2001; Kahn & Byosie, 1992).

The present findings are in line with the qualitative research report, with the support of in-depth interviews conducted in oil palm plantations by Vetric (2012). The research reported job abuse, lengthy working hours, use of risky machines or use hazardous chemicals, poor living environments and situations leading to a form of debt burden and victims human trafficking. Present research is also well noted with the above observations. Injustice in making provision of the decent working and living conditions with the minimum wage is seldom observed in small and medium plantations in the oil palm plantations of Sabah.

In line with the above deliberations, Ruhs and Martin (2008) report indicates that the immigrant workers come to Malaysia in search of greener pastures and as a way to cater for their families and solve the poverty problem. On arrival, many of these workers labor in a circumstance that defines job abuse. Their wages are withheld for months and they might have virtually no money to take home every month after settling their employer's monthly charge for the renewal of the work permit, pay deductions for mistakes, and expenses for food and rent. Most of their labor for lengthy hours, plus extra hours for which they receive no pay. Also many labor daily as well as weekly. In Malaysia, palm oil production is extremely reliant on visitors or settler workers with an approximately 450,000 non-nationals employed on its plantations, majority of these people from Indonesia. Even though the law permits that they enjoy benefits like Malaysian workers, it is commonly said that they are remunerated not as much as the minimum pay (Ruhs & Martin, 2008).

The above discussion is also supported by another qualitative research report coming from NGO (Verite, 2010). The report is in line with the present observations of this particular study which indicates that workers are subjected to bad spoken and bodily abuse; women are exposed to sexual pestering and attack occasionally, as well as rape. Many workers work with risky machines or use hazardous chemicals; most of the time without defensive kit or counseling on how to protect themselves against injury. When they are involved in mishaps at work, their organization may decline to pay for their medical care and in several cases compel to go to their home countries.

Most of them live in poor environments. Most of the jobs done by foreign laborers cross-examined for this study are compulsory work.

Laborers may be restricted to their work environment, intimidated with the force, or stay unemployed. Many have borrowed money with high interest rates, counting on the assurance of a good job in Malaysia, only to discover that they are in situations that can be likened to the debt burden. Besides male laborers are hired on the basis of deceit or scam—they are deceived about the nature of the job, the wages paid, the duration of work and other terms of the job. When laborers are hired based on deceit or scam into forced labor or other forms of labor abuse, they are victims of human trafficking (Verite, 2014). The oil palm workers are under the shadows of injustice and unethical work climate in the oil palm plantations in Malaysia. In another investigation (Tepper, 2000) outlined the consequences of work-associated anxieties, intentions to leave and stress on growth (Cox, 1991; Harvey, 1996) as well as real reports of work turnover.

Correlating such observations with several studies in other fields, it is reported that hazardous and unsafe working conditions, poor welfare and wage administration, nature of job, deprived living conditions, lack of job fulfillment, emotional distress etc. are well related to the workers' intention to leave oil palm plantations. Referring to such situations, it is reported that negative conditions (harm, hazard, uncertainty, emotional distress, lack of promotion and discrimination) were found to have different impacts on workers leaving (Bockerman & Ilmakunnas, 2009; Cottini, Kato, & Nielsen, 2009). Likely cause of work change intentions and job hunting is the

negative working situations. It is undoubtedly a very significant factor of work characteristics. Perceived alternative employment opportunities, job hunting, intention to return to home is thus manifested symptoms of unethical work climate prevalent in the oil palm plantations in the Sabah region of Malaysia.

Theoretically, the outcome of the study provides empirical evidence on the direct relationship between psychological contracts on foreign workers intention to leave oil palm plantation. It is found to have a negative relationship between psychological contract and between employer, workers and their intention to leave. Thus, the hypothesis H4 of the study is supported. Past studies have verified this relationship viz., psychological contract and workers intention to leave (Armstrong, 2009; Gakovic & Tetrick, 2003; Suazo, Turnley, & Mai-Dalton, 2005; Kiefer & Briner, 2006). The lower the psychological contract between workers and the small holding plantations owners/managers, the higher the worker's intention to leave will be.

There are several struggles associated with foreign workers live in oil palm plantations. As it is indicated elsewhere, the foreign workers employed in oil palm plantations are coming from neighboring countries of Malaysia like Indonesia and the Philippines. They are under struggle of extreme form of poverty and unemployment in their country. Their social and economic situations force them to work in the oil palm plantations of Malaysia as migrant or foreign laborers. Some of them come through legal ways and the others through illegal means. In line with the above discussion, it is specified that to bring down the workers' salaries and engage them

that will accept “meager pay for the difficult job” philosophy of the organization. The plantation management has resolved to hire more of foreign laborers via both lawful and unlawful means (Navamukundan & Subrahmanian, 2003). The recruitment of these foreign workers is done through sub-contractors. These workers are not under the muster role of the small and medium holding oil palm plantations.

In line with the above discussion it is well observed by The Edge (2012) that the government of Malaysia introduced a central immigration scheme that substituted simple enrolment. The system is aimed for organizations to contract out hiring to a unified set of labor agents. The Malaysian Ministry of Home Affairs grants these authorizations. The authorities justified the institution of subcontracting as a way to stop the abuse of foreign laborers and many other issues. In this arrangement, businesses recruiting less than 50 workers are expected to use specific subcontracting firms, and organizations with more than 50 workers can make use of the facilities of subcontracting firms or can hire right away. The subcontracting firms are in charge for all managerial matters, and all obligations for labor supervision are transferred from the organization to the subcontracting firms. The agent undertakes the obligation for hiring and human-capital supervision of workers, including salary, accommodation, haulage, and settling all legal conditions (such as permits, visas, etc.) of foreign workers. The agent also signs a predetermined bond with the client firm, specifying the terms of compensation (number of workers and a period of time). In reality, these agreements can however be passed off onto many other outsourcing firms (The Edge, 2012). These sub-contractors avoid paying statutory welfares to

laborers because wages are paid in little chunks. All responsibilities relating to labor matters are transferred to the contractor. This is cost effective and simple means of acquiring laborers. The plantation is not obligated to give any employment agreement to the workers; all that is needed is an agreement between the contractors and the plantation owners. With this system, workers' rights are easily violated.

As such there is no contract at all between the workers and the employers. The legal system is prevalent in the country also justified the institution of subcontracting. Unfortunately such scenarios are leading to high immigrant labor exploitations. These groups of contract workers are recognized and remain unprotected by labor laws; they are migrated frequently and are at a high risk of being apprehended, in prisoned and expatriated. They are also exposed to health risks and have no access to medical care or treatment (National Union of Plantation Workers [NUPW], 2000), compared to remuneration rates in other countries where similar jobs are done such as Indonesia, Thailand, and Philippines. Lack of trust on plantation management and the uncertainty prevalent in the work environment, consequently, leads to a low level of psychological contract and foreign workers intention to leave oil palm plantations.

As it is indicated by several research scholars, if a worker understands that the organization cannot fulfill a vital anticipation in the agreement, there is usually a sense of unfaithfulness; as if the actual agreement has been breached in bad faith. This can develop into "shock" or the decisive moment that starts the downward cycle towards disengagement and exit. The results of breach of psychological contract in

behaviors, described by Rousseau (1995) are (a) the exit (end of the association), (b) the voice (efforts to solve the breach), (c) the loyalty (quietness, readiness to tolerate), and (d) the destruction (disregard, ineffective conducts). When worker perceives there is breach in psychological contract, they experience stress. If there is violation of psychological contract, it will damage the rapport between the workers and their employer, it will also reduce the job satisfaction of the workers, as well as lower their commitment with the organization, leading to greater opportunity of workplace deviance (Lambert et al., 2001).

These deviant behavior may be precipitated in the form of searching for new employment, job hunting, returning back to their home country, moving from one plantation to another following the mandors guidance etc. The plantation workers are cut off from the decent working and living conditions, due to their remote habitation which is unsupervised by authorities. Plantation management controls the fate of these workers. The lower level of psychological contract in this research indicates that there is a wider breach of contract in relation to make provision for the decent working and living conditions in the oil palm plantations. The discussion above indicates the strained psychological contract prevalent in oil palm plantations in Malaysia and support the present finding of a nature of employment leading to workers intention to leave oil palm plantations in Sabah region.

Intention has been recognized as the immediate predictor to actual organized (Sommer & Haug, 2010). Sheeran (2002) offered support that intention has a significant relationship with behavior. The higher the challenges associated with the

work, the higher the work stress which is related to worker turnover. Several researchers have pointed out the risk factor associated with the oil palm work. Risk aspects include fast and repetitive motions, continuous static loading, discomfited position, applying outside power with compression and throb or any of them that is joined together are also considered to be taxing to any or all of the body regions (Kirkhorn & Schenker, 2002; Sesto, 2000).

Although, when there is intent to quit, it will not essentially result to real quitting, the thought of quitting will definitely affect the performance of the organization because it make significant impact to work ineffectiveness, disengagement as well as absenteeism (Kivimaki, Vahtera, Elovaino, Virtanen, & Siegrist, 2007). All these workers behavior is termed as a form of deviant behavior, which rests with the management decisions on how well the job resources and environment may be pooled to organize the work effectively. As it is widely observed with previous research findings that lack of mechanization adoption in small and medium scale plantations are well associated with workers physical stress and allied consequent oriented behavior of intention to leave. The workers intention to stay or leave therefore depend on the nature of work and supportive facilities that they obtained to perform the task, in oil palm plantations.

5.1.4 **The relationship between Job stress and Intention to leave**

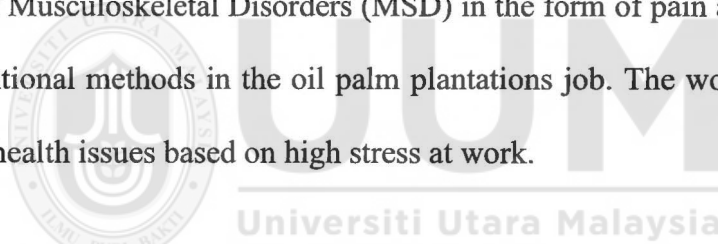
Research Question 4

- Does job stress have any direct and positive relationship to workers intention to leave among in oil palm plantations?

The empirical evidence from the study shows the significant, positive and direct relationship between job stress and intention to leave. It is found that H5 is supported in the studies, which mean that job stress has the significant positive relation with workers intention to leave the oil palm work. The finding of current studies implied that the higher the job stress conditions, the higher the worker's intention to leave from the plantation work.

This particular research need to be explained with several models (Greenberg & Baron, 2011), which establishes the relationship between stress and intention to leave. According to this model, the worker's decision to quit or not to quit depends on two key factors – shock to the system and decision frames. Shock to the system can relate to an event that get the worker's attention and gets the worker to start thinking about their jobs. Decision frames relate to a set of rules and images on how to interpret something that has happened, for example, things that the worker believes in and as a result, might have an obvious response to a situation based on what has happened in the past (Greenberg & Baron, 2011).

Contextualizing the topic to poor mechanization and deprived working conditions in oil palm plantations in Sabah, Malaysia the situation is much severe. Although Malaysia is one of the largest crude palm oil exporter in the world, still they are undermined because of their harvesting method which is traditional and labor intensive. Efforts to mechanize the harvesting system, especially the filling method of tall palm trees have been ineffective. In the early stage of oil palm's fruit bearing life, i.e. 3 to 4 years of age, fruit bunches are still reachable with a chisel used to cut the fruit bunches. By age 8-10, when the trees have grown very tall, a sickle mounted on flexible telescopic aluminum tube (pole) is used (Ng et al., 2013). As it is pointed out by Kamaruzaman and Fauzi (2009) that the oil palm plantations labors are subjected to a risk of Musculoskeletal Disorders (MSD) in the form of pain and damages due to the conventional methods in the oil palm plantations job. The workers are subjected to several health issues based on high stress at work.



Adoption and integration of mechanization are a solution in reducing job stress in oil palm plantations. Major large scale plantations have adopted mechanization in order to reduce the health risk factor, however the small and medium plantation still follow the harvesting and related operation process with the support of traditional machineries aggregating the scenario of lack of safety and security in working conditions, leading to several health-related problems. This scenario is well cited by several authors (Duraj, Miles, & Meyers, 2000) contextualizing the issue to agriculture in general and oil palm plantation in particular.

The working and living conditions (Burker, 1998; Williams, 2003), ethical work climate (Accenture, 2012; Rainforest Action Network, 2013; Verite, 2012), issues related to psychological contract (Robinson, Kraatz, & Rousseau, 1994; Gakovic & Tetrick, 2003) are variables framed in the present research model to explain the foreign workers intention to leave are clear indicates that the workers are exposed to several form of stress at work. The experience of job associated pressure (job stress) as well as variety factors that results to job stressors makes workers want to quit (Ongori, 2007).

5.1.5 Job stress mediation effect on ethical work climate and psychological contract leading to intention to leave.

Research Question 5

- Does job stress mediate the relationship between ethical work climate and psychological contract on intention to leave among workers in oil palm plantation?

The present study is consistent with several research outcomes (Johnson & Indvik, 1996; Gupta & Beehr, 1979) which indicate that the view of a pressurize work setting favor worker choice of quitting their organization. Gupta and Beehr (1979) showed that job-associate stress better elucidate intent to quit than the exit itself. Subject to empirical findings, Gupta and Beehr (1979) elucidate that workers constantly exposed to stressful environment may possibly experience the need to leave without essentially resigning because majority of external factors may possibly hinder the

choice (for instance, job market situation, spouse's job, social fabric, among other factors).

However, few researchers indicate no linkage (Hendrix, Robbins, & Summers, 1999; Tuten & Neidermeyer, 2004), majority of the studies offered significant linkage, recommending that the more workers view their job as stressful, the better their intent to quit the organization increases (Firth, Mellor, Moore, & Loquet, 2007; Gupta & Beehr, 1979; Kemery, Bedeian, Mossholder, & Touliatos, 1985). The working and living conditions of oil palm plantations seldom assure any safety and security, decent wage, proper accommodation facilities and allied amenities which are considered as the bare minimum for sustenance to the foreign workers. The resultant manifestation of such nature of working and living conditions is the job stress. Higher the level of job stress workers experienced from the precarious working environment, higher the workers intention to leave from oil palm plantations. Past studies also support the overall job dissatisfaction, workers intends to quit their jobs due to the poor working environment they encounter (Griffeth, Hom, & Gaertner, 2000; Hom & Griffeth, 1995).

This particular study also observed the mediating role of job stress between ethical work climate and workers intention to leave. The result indicates that job stress acts as mediator between ethical work climate and workers intention to leave from oil palm plantations in Malaysia. The study thus shows that the level of stress mediate the influence of ethical work climate on worker's intention to leave from small and

medium oil palm plantations. The relationship between job stress and ethical work climate has been examined by many researchers (Hart & Cooper, 2001; Kahn & Byosie, 1992; Accenture, 2012; Rainforest Action Network, 2013; Verite, 2012).

The relationship between ethical work climate and actual turnover is unclear. Most studies have either included only turnover intentions (Fournier, Tanner, Chonko, & Manolis, 2010) or reported that the relationship between ethical work climate and turnover is mediated by other variables (DeConinck, 2011). In this particular research the unethical work climate and turnover intention relationship is examined with the mediation effect of job stress. It is identified that various researches that workers who robustly identify with their plantation have the possibility of demonstrating higher loyalty as well as having lower intent to quit (Cole & Bruch, 2006; Olkkonen & Lipponen, 2006; Riketta, 2005). This situation will be on the opposite side if the workers feel an unethical work climate. If a worker perceives their organizational values and ethics are blatantly violated and they are faced with injustice in working and living conditions, as a result he/she would quit his/her job. The result of the present study indicates that values and ethics are blatantly violated. This instigates a feeling of injustice among the foreign workers.

The literature in the past substantiates the unethical work climate in the form of injustice is existing in oil palm plantations (Amnesty International, 2010; Verite, 2012; The Jakarta Post, 2008). The working conditions are a bare minimum and the poverty ridden condition of the foreign workers are highly exploited by the plantation

management in the small and medium oil palm plantations. Empirical evidence suggested that ethical fit is significantly associated with turnover intentions and organizational obligation (Ambrose et al., 2008; Sims & Kroeck, 1994). Earlier studies thus have shown that intention to leave an organization is constantly linked with actual turnover (Griffeth, Hom, & Gaertner, 2000). Rising concern in turnover intention study started from the fact that it is a good substitute pointer of actual turnover (Radzi, Ramley, Salehuddin, & Jalis, 2009; Price, 2001; Griffeth, Hom, & Gaertner, 2000; Ajzen, 1991). Various reasons can be attributed to this finding. This decision originates mainly from the nature of work, working and living condition and the management approaches. At times work stress affects the workers profoundly by deteriorating both physical and psychological functioning leading worker to take a decision to leave the plantations. The study thus shows that the level of stress partially mediate the influence of ethical work climate on worker's intention to leave small and medium oil palm plantations.

The study also witnessed the mediating role of job stress between psychological contract and workers intention to leave. The result indicates that job stress acts as mediator between psychological contract and workers intention to leave oil palm plantations in Malaysia. The H7 is well supported in this research. The study thus shows that the level of stress mediate the influence of psychological contract on worker's intention to leave small and medium oil palm plantations.

The oil palm plantations in Malaysia are subjected to several human rights violations and it is reported by several international research organizations. Since the time they are recruited by private agents and mandor, until the time they intend to quit from the job, they are exposed to several humiliations. As it is discussed above the working and living conditions in oil palm plantations are precarious in nature. Though government rules and regulations are existing and it seldom ensures decent employment conditions, which develop a psychological contract between the employers and the workers. Due to remote habitation and living with bare minimum sustenance the level of stress experienced by these workers are quite high, which influence their decision whether to continue or not in the oil palm plantations.

Substantiating the above arguments, it is indicated by several researchers that intention to leave is the outcome of worker's subjective evaluation of the probability to leave the organization in the near future (Mobley, 1982; Mowday, Porter, & Steers, 1982). Wunder, Dougherty and Welsh (1982) as cited in Firth et al. (2007) have found that job stressors has direct linkage with the intent to quit. Firth et al. (2007) concluded that despite the limitations in turnover research, four factors have been identified as consistent predictors of intention to leave: the experience of job-related stress, stressors contributing to job-associated pressure, deficiency in organizational commitment as well as job satisfaction (Firth et al., 2007).

Rigotti's (2009) research of threshold models indicated that the higher the degree of violation, the higher dissatisfaction in addition to distrust workers will have, and a

higher intent to quit. A study by Dewe and Kompier (2010) negative well-being output like irritability, uneasiness, depression would result to in displeasure as well as intent to quit the organization. These studies are well correlated with the present study leading to foreign workers intention to leave in small and medium oil palm plantations of Malaysia.

As it is pointed out in the hypothesis, the workers in the oil palm plantation have to engage in such a job which invites several physical and psychological stresses. Several researchers have pointed out the risk factor associated with the oil palm work. Risk aspects include fast and repetitive motions, continuous static loading, discomfited position, applying outside power with compression and any of them that is joined together are also considered to be taxing to any or all of the body regions (Kirkhorn & Schenker, 2002; Sesto, 2000). It is shown that body part that could be severely disturbed at harvesting stage includes lower back, upper back, hands and arms as a result of the type job and job prerequisite. Considering the related risk elements, the national research council and institute of medicine (2001) suggested a conceptual framework demonstrating the difficult inter-linkage of workplace, organizational as well as social elements and individual factors which may have impact on the improvement of MSD.

Additionally, harvesters will possibly simultaneously be affected by a variety of cultural, organizational, psychosocial as well as personal risk factors. Particularly, in a situation that foreign labor is engaged, homesickness, health in addition social economic well-being of relatives and smoking pattern as well as being plumb up

would possibly increase the risk of building an MSD. These danger factors have been indicated in different researches to have a significant effect on MSD (Bernard & Fine, 1997; Sesto, 2000). The level of stress this influence equally the worker's intention stays or leaves the plantation. The higher the ergonomic issues, the higher the workers stress and it will further lead to their decision to leave the plantation jobs. The result of the study thus substantiates the partial mediating role of job stress in between ergonomic issues and foreign workers intention leave in oil palm plantations in Malaysia.

5.2 Contributions of the Study

Several implications of this particular research is discussed in the following sections such as theoretical implication, managerial implication to the plantation management, managerial implication to the government, and the managerial implication to the Non-Governmental Organizations (NGO's) which are presented next.

5.2.1 Theoretical Contribution

This study empirically tests the direct effects of ethical work climate and psychological contract on job stress and foreign workers intention to leave from oil palm plantations of Malaysia. Then, it tests the indirect effects, via, the mediation effect of job stress, on two predictors (ethical work climate, and psychological-contract) effect on foreign workers intention to leave. The suggested predictors relationship with job stress and workers intention to leave would enrich the conceptualization of foreign workers attrition or labor

shortage rooted causative factors in the context of oil palm plantations in the Sabah region of Malaysia. Overall, the results are consistent with the hypothesis formulated with the base from the literature. The results can give push to improved working and living conditions of foreign workers in the small and medium scale plantations in Malaysia in general and with specifics to Sabah region of Malaysia. The determinants of job stress and foreign workers intention to leave are mostly visible in the form of poor working and living conditions, unethical work climate, and the low level psychological contract substantiating the theoretical position taken from the Social Exchange theory.

This study intends to develop a theoretical framework to identify the determinants (unethical work climate and psychological contract) of worker's job stress and intention to leave small and medium scale oil palm plantations, which is correlated to the labor shortages that bound the plantation management to recruit foreign workers from neighboring countries of Malaysia.

The findings of direct and indirect effect of the determinants of job stress and workers intention to leave the oil palm plantations have supported significant and positive relationship linkages to seven hypothesis suggested. The entire hypothesis pre-assumed to operate the thesis were well acknowledged by the respondents, with due consideration to the unique labor-management relations existing in the small and medium oil palm plantations. In addition to that, the results of the indirect effect on job stress and workers intention to leave the oil palm plantations have four linkages to support significant relationship. These results would advance the empirical literature in human resource management (HRM), organizational behavior (OB), plantation management, good

corporate governance, strategic human rights and duties, strategic management, human service organizations management (HSO), international public administration, social policy and development disciplines. The direction of the relationship in this study has verified and extended the theoretical consistency that exists in the previous literatures. The study support advancement of literature in the grey area of oil palm plantation human resource issues.

The most important thing in undertaking an empirical research lies on its contributions in the form of observations and findings. The result emerged out of the determinants of the job stress and workers intention to leave the oil palm plantations have better generalizability and prediction, since it categorically followed the validity and reliability of the existing instruments even with the support of development of two new instruments.

This study used the structural equation modeling (SEM) method. By using this method, a few advantages could be derived such as a strict examination and testing of the measurements through confirmatory factor analysis (CFA), is achievable for generalization, complex research model with multiple dependents and mediators could easily be tested, and causal relationship could be established. The research model of this study's first attempt is based on the dimension of unethical work climate and psychological contract which utilize the Social Exchange Theory and Job Demand and Resource Theory to explain the determinants on job stress and worker's intention leave the oil plantations in Malaysia. The integration of the methodological relevance ensured better analyses using structural equation modeling (SEM) analysis and with which the result is more concrete.

The data collected from majority regions of Sabah, Malaysia, like Tawau, Sandakan, Kudat, West Coast (Pantai Barat) and Interior (Pendalaman) area, thus ensured data representation arrive at valid inferences. The issues may be well generalized for its interventions since the methodological applications are fine-tuned for better predicament. It has also increased the evidence of new knowledge on issues related to working and living conditions, unethical work climate, the psychological contract and its effect on foreign worker's job stress and intention to leave small and medium oil palm plantations in general.

5.2.2 Managerial Implications to Plantation Management

The result of the present study also has implications in relation to plantation management. One of the major stakeholders of this research is the plantation management. The result of ethical work climate and psychological contract are closely connected to the plantation management's managerial decision making.

The outcome of the study in relation to all these determinant factors (ethical work climate and psychological contract) are closely accompanied with plantation managements professional approaches, leadership style and labour management relationship in small and medium scale oil palm plantations. Several dissatisfaction reasons are identified by this research that includes minimum wage to the foreign workers are not ensured, lack of health and safety provisions, lack of living conditions assurance like electricity, transportation facilities, drinking water, reasonably priced food items, and proper accommodation facilities, force labor, child labor, physical abuse and harassment by

mandors, owners keep the passport and never renew it, poor transportation facilities, long working hours etc. The decision related to wage, safety, security, contract employment, succeeding the government rules, accommodation facilities, transportation facilities, safe drinking water facilities, making provision of basic amenities very deep inside the plantations etc., are the lying with plantation management. The result pointed out that such poor working and living condition factors develops high stress and influences foreign worker's decision to leave the oil plantation work. The study discloses the ineffective managerial approaches, authoritative leadership style and poor labour management relationship in small and medium scale oil palm plantations.

The findings on the deprived level of working and living conditions existing in oil palm plantations. The study conducted a research carried out by Saiyadain and Ahmad (1997) in Malaysia observed that 68 to 90 percent of workers in private as well as government estates highly detect poor working conditions in their estates. This was further affirmed by the response of the estate managers. Almost in tune with the above studies the present finding also indicate the prevalent in the oil palm plantations. The practical approach to battle involuntary turnover is for managers to retain as well as support the staffing practice that is presently globally practice (recruitment, selection, orientation, ensuring working and living conditions etc.) and uphold the style of constructive and proactive management, which invite better appreciation from the workers.

The findings on the ethical work climate indicate that there is poor level of working and living conditions existing in oil palm plantations. The unethical climate is perceived in the form of poor organization of work and life in the oil palm plantations. These include,

the wage discrimination, (the workers are not getting minimum wage) extending basic facilities like accommodation, food, drinking water facilities and safety and security at work and life. The exploitation on the foreign worker's by the contract laborers and the mandors in the oil palm plantations need to be well-ordered by the keen effort from the oil palm plantation management part. The plantation management should be committed in making effort in ensuring the payment of minimum wage to the workers and decent working and living conditions. Improving the quality of life and environment that benefits both the company itself, local communities and workers in general, by participating in improving the welfare of the workers and community with the implementation of developments around the estate through various activities such as education, health, infrastructure, agriculture, small and micro enterprises, sports, arts, religion, socioeconomics, etc. The best practice are established to be significant in decreasing turnover in the organizations.

The study results pave much insight into several external environment causes also. This result may contribute to unethical work climate challenges for workers, for example, instability and insecurity arising from government, or alternative employment opportunities, an unanticipated outside work offer, and so on. Psychological causes and sources, more specifically include, deficiency in psychological meaningfulness well as psychological security at work; deficient in recognition with an organization, be deficient in trust, a sense of being undervalued, perceived unfairness in pay as well as performance, unrealistic goal, pressure, nervousness, unconcern etc.; Organizational causes, like company's culture with inadequate norms, traditional, rules, along with

practices (immoral dealings, sexual persecution, ethnic bias, irrational implementation of power, etc.); bad working situation, poor management as well as leadership; overrun bureaucracy; be deficient in resources, low standard with recognition of poor performance; work complexity, etc. leading to foreign workers intention to leave the plantation.

The study does point out a few measures that the small and medium plantation management can look into.

Decent Pay and benefit

In order to control the situation the owner should design a pay and benefit package that is distinct from another plantation in the same sectors. In addition to that, the owner should ensure all the benefits which are offered by the plantation are genuinely appreciated by the worker.

Major factor owner should consider is the base pay rates which are internally equitable and externally competitive. Competitive wage and fringe benefits including wage, bonuses, and health insurance packages are tools that companies can use to help keep workers retained within the plantation. Offering bonuses or even a small hike each year lets the workers see that they are moving ahead, rather than questioning themselves, why they should stay within the plantation. Since underpayment infers low value to the foreign workers frequent wage reviews are also good enough to retain them.

Salaries need not be the highest in plantation geographic location but should be reasonable. Paying low salaries lead to a scenario where better performers will leave and low performers will take their jobs Wage increases should be structured to stay competitive within the market sector, location and the position.

A distinction between the top and bottom performers at work to be made by ensuring that those individuals performing in the top quartile are paid over and above those in the bottom quartile. Performance based pay structure may bring satisfaction to those workers who work more and get paid well incidence with their contribution. Workers want to be paid well for the job they do, both for their self-esteem and as a practical means to live. The advantage of a well-placed compensation structure produces better appreciation for the worker's level and they feel respected and valued in correlation with the contribution they make.

A highly structured compensation approach allows firms to establish equity in compensation, avoid the dependence on personal relationships that makes it difficult for a firm to grow, and ultimately create a system that can embrace many new workers. So the owner should re-look the present compensation structure and measure to be taken to reduce high wage disparity.

The highly-structured base compensation system used involves four components:

A clear job description and responsibilities. The first step the estate take when structuring compensation is to design a detailed map that explains the characteristics of the position, the required skills and the responsibilities (Harvesting, maintenance, spraying & etc).

Market-determined based compensation. The best of the plantations consult plantation-specific studies to establish the foundation for an worker's wage. Most of the plantation also consults local surveys and sources to obtain an estimate for the adjustment necessary to reflect their local geographic market.

Regular reviews and adjustments.

Review wages semi-annually or annually, again by referencing external sources and by considering changes in the responsibilities and skill level of the worker. The firms should commonly use a cost of living adjustment tied to the reported inflation rate. Majority best plantations usually establish a base compensation by referencing plantation studies as well as consulting with other large plantation and their peers in formal or informal study groups. It's the responsibility of the owner to make provision of better base pay that satisfy worker's psychological needs psychological needs include things such as food, water, shelter and clothing, all of which can be satisfied with a reliable income. Considering the increasing price indexing of a developing nation like Malaysia, the base wage and the compensation fixed by the plantation is not fine tune enough to satisfy the basic needs of the workers.

In order to avoid foreign worker's intention to quit the job, an equal treatment in pay and distribution of fringe benefit to be made. Standard parameter should be followed which ensure worker satisfaction related to pay and benefit.

Reward Owner

System may be envisioned in the form of see quantifiable goal for better evaluation of performance; better compensations based behavior towards accomplishment of tasks; never allocate wage indiscriminately; compliment the action of individual; Make worker know the performance value (based on harvesting of FFB); develop a wage system that matches with the culture and values widely held by the plantation; ensure the accountability of the wage system across the vertical (harvesting/ maintenance/spraying); introduce individual and group wage system; ensure healthy competition to improve the effectiveness of competency based better performance; ensure compensation package in tune with the personal life balance; superior workers to be motivated to exceed their expectations and mediocre performance will be encouraged to improve performance; personally thank the worker for a specific job well done; share valuable and remarkable worker performance with top-level officials; avoid ethnic clashes selections; never make use of denial of compensations as punishment behavior; and motivate the subordinates through recognition and support (Kumar, 2006).

Harassment Policy

It has been observed in the qualitative research that female workers are facing harassment issue from the mandor or co-worker. It is expected that the company should have one of the other form harassment policy. Harassment in any form can cause any good workers to leave the plantation. No worker should need to tolerate harassment and the stress and anxiety.

Hence plantation should take zero – tolerance policy. Strategically by enforcing a zero – tolerance policy is good for workers, specifically female workers to get safety and security in the workplace, which further to motivate them to stay back. The male workers should get a proper idea about the consequences about harassment at work and make it further clear to all workers. The plantation policy related to harassment should be communicated to managers during their orientation for all new comers.

Worker- worker relationship

Another observation made in this research is in relation – Worker- worker relationship within the plantation. This indicates that lack of friendly atmosphere in the plantation among the workers. A healthy worker environment clearly provides us an understanding on sharing and caring attitude and behavior within and outside the work environment. They share information and with a collective consciousness, in task accomplishment. In strategic point of you it is the responsibility of supervisors working in each block to create an environment in which workers interact with each other and work for towards effective task accomplishment. The supervisors should take up the lead in ensuring a sense of belongingness between foreign workers for congenial working environment. A proper working relationship and personal relationship between the workers develop such a strong culture where workers never think of quitting the job.

Relationship with owner

A strong work culture showcase harmonies relationship between owner and foreign workers. The owner is an important factor which determines congenial working between

owner and workers. It has been observed in this research that there is a poor relationship between owner and workers at work. Strategically the manager should behave properly towards workers leaving their power and authority which develop better interaction between each other. The manager should move away finding mistake attitude and should show their emotional maturity to accommodate their workers. By extending their supportive hand, the owner will create trust and confident element among workers and they feel more obliged to the plantation at large. Wherever there is an opportunities talk to the workers freely irrespective of their position power and authority. To develop a good work environment, the owner should call upon participative decision making process, proper communication, reward owner, mentoring, coaching, leadership support to be done etc.

Supportive owner

Leadership is the crux of motivation and retention of foreign workers in an plantation. To what extent the owner takes care of values related to people through leadership that determine worker satisfaction and a person's commitment at work. The owner should communicate the vision and mission of the plantation through their actions. To what extent they encourage, motivate and develop foreign workers in the plantation that fascinate and stimulate workers to stay back in the plantation. Strategically the owner should showcase the real values that associated with the work culture, and convert the negative energy into positive solutions. The owner should strategically follow transformational leadership style and act as a mentor in inducing professional and personal value integrating ultimately business goal.

Worker Confirmation (working permit- working pass)

It is observed that the foreign workers in the plantation dissatisfied with the plantation policy of keeping the passport without renewing and taking money monthly. Foreign workers generally expect that the employment confirmation should be after their probation period. Delaying passport process based on sheer reasons like roadblock, aggressive behavior etc. developed dissatisfaction among workers leading to their decision to search for new employment.

In order to control this situation plantation should take effective measure to ensure foreign worker confirmation soon after their probation period, in case the foreign workers meet with the company expectation. In order to ensure the availability of the proper foreign workers as new comers the recruitment and selection criteria to be more effective. Worker's attitude, behavior, skills and aptitude to be well evaluated well in advanced before foreign workers' entry to the plantation. This facilitated proper socialization, proper orientation and timely confirmation of foreign workers' in the plantation job.

Target orientation (harvesting –FFB)

One of the concern shared by the workers in the plantation is high task and target orientation this indicates that the owner oriented towards work rather than people. Heavy work orientation meeting the dateline and quality effected workers' enthusiasm at work and leading their intention to leave the plantation. The high target orientation affecting foreign workers' health at work.

In order to curb this situation it is suggested that the owner should balance concern for work and concern for people in the plantation. The worker should be engaging in the achievable and smart target will develop enthusiasm among foreign workers leading to better quality orientation between them. Effective job requirement capability matches to be made well in advanced before assigning the task to the workers.

Safety

One of the major concerns shared by the workers in relation to workers to leave is a poor safety environment followed by the plantation. The workers have the feeling that they aren't getting proper safety equipment during their work. Making provision of nonstandard and old equipment is against the standard operation requirement will lead to an insecure feeling among foreign workers. This indicates that the plantation lack of safety culture.

To have the strategic intervention which induces secure feeling among workers the owner should make provision of safety equipment like shoes, glove, goggle, etc. in the accordance with the standard requirement at work. The plantation owner should ensure a proper safety culture eliminating workers insecure feeling in handling chemical substances and engaging in technical operation to be done. Higher the safety cultures leads to higher the feeling of security that enhances motivation and engagement at work.

Ergonomics

It has been already pointed out in one of the findings that the nature of work necessities long standing high movement bending and strengthening body posture etc. that develops high physical stress among workers this indicate that the operation of work are not scientifically plan leading to high wear and tear in relation to their physical conditions lack proper rest, lack of leisure, high target orientation, heavy work movement all leading to workers ergonomic issue.

In order to provide effective solutions to ergonomics issues the owner should make a scientific study of ergonomics issues of plan that reduces health issue related to work. Based on the job description, technical operation proper work design to be established for better workers' health.

Health

One of the major concerns of workers in relation to their intention to leave is unsafe conditions and health facilities extended by the plantation. The workers are not avail of proper medical facilities within the plantation there are not accessible to medical facility also this has created high dissatisfaction among workers. In order to ensure workers' better health the owner should make provision of medical facilities within the plantation and proper referable facilities in the specialties with the full support. On contingency situation in order to avail of emergency services proper transport facilities also should be provided within the plantation.

5.2.3 Managerial implications to Government

The result of the study clearly indicates that the precarious working and living condition existing in the oil palm plantations of Malaysia. These factors are an eye opener to the government to look into the plight of oil palm plantation workers and to at least ensure fair wages and decent living conditions. Issues related to injustice, unethical work climate and allied social issues in both countries need to be tackled with proper intervention strategies. The study findings direct the role of governments of Malaysia and Indonesia. In order to curb the problem, the government of Malaysia and Indonesia should act decisively and quickly to respect the rights and dignity of Indonesian migrant foreign workers.

The 'stateless' and 'unique living conditions' of the foreign workers living in remote locations of oil palm plantation. Majority of the foreign workers are from Indonesia and Philippines. They've crossed their countries to engage in plantation work for over a long period of time. They do not have the status of Malaysian citizenship nor do they have their own country passport. These foreign workers are living in small holding plantations keeping themselves away from police and other enforcement agencies in Malaysia. Their living condition is unsafe, insecure and highly isolated.

These foreign workers have to totally depend on the mandor's and plantation manager's support to sustain their life in remotely located oil palm plantation. They are more into bonded labor status due to their indebtedness. It is observed in this research that due to big family size and low wage structure, these foreign workers are living with subjugated

living and working conditions extended by the mandor's and plantation management in oil palm plantations. The foreign workers don't have any voice since they have to work their day to day sustenance. The result of the study compels us to have more or less effective interventions on the part of the government.

The crucial considerations, including Indonesia as well as Malaysia government should vigorously secure and watch the treatment of foreign migrant workers rather than relinquishing these tasks to labor representatives. Thus proper implementation of rules by labor agencies, more careful oversight of the job of such agencies, as well as implementation machinery that involves obligation of considerable punishment on agents who violate workers or abuse the rules. Malaysia government should also think about amending its employment as well as immigration laws to offer migrant foreign workers full security under the law.

Malaysia should also think about amending its laws to promote civil lawsuits in addition to the trial of criminal cases against rude employers in addition to better react to the desires of fatalities of abuse. Government's obligation requires taking appropriate steps to prevent, investigate, punish, and handle violations that occur through effective policy, legislation, regulation, and justice. The government is also obliged to clearly define provisions for establishments respecting human rights in all their operations in the state's jurisdiction.

5.2.4 Managerial Implication to NGOs

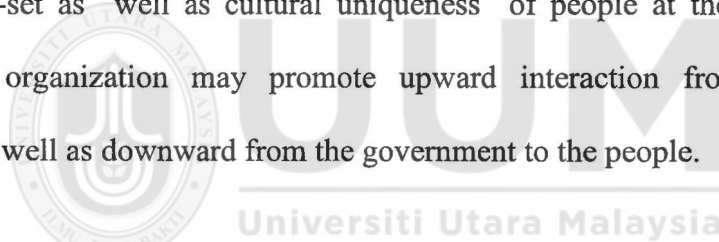
This particular case study was conducted to understand the precarious working conditions that are prevalent in the oil palm plantations of the Sabah region of Malaysia. The study echoes several human rights violations, which are rampant in the small and medium holding plantations in Malaysia. In order to curb this scenario, effort from several levels and institutions are keenly expected. Major efforts are expected from the plantation management. However, the government and the NGOs, whom have the keen role in education and making provision of better welfare services for these foreign workers habitation in remote locations, are well sighted into.

The message gotten from this study is that the local people are not interested in engaging in the oil palm plantation jobs due to dirty, dangerous and distant nature of jobs. The plantation management have to engage workers from neighbouring countries like Indonesia and Philippines to run the plantation activities. The foreign workers choose plantation work due to their poor socio-economic conditions prevalent in their countries. It should be well reminisced that these communities should be well protected and safeguarded by the Malaysian government, plantation management and the NGOs since they contribute well to the economy development. The plantation management ought to follow business ethics in the operations of plantation work. Moreover, government should be vigilant on the human rights violations, which is happening in the oil palm plantations of the Sabah region of Malaysia. NGOs have the keen role in the coordination of these two institutional agencies in bringing better beams of light to these foreign workers in the oil palm plantations.

The significant predictors of job stress and foreign workers intention to leave could indicate the way forward to improve and maintain a decent working and living conditions for workers in the oil palm plantations. The improvement of working condition, living condition, and establishment of ethical work climate would develop better psychological-contract between workers and employers. Such efforts would be the priority agenda for retention of workers in the oil palm plantations. The NGOs can intercede in the issues of working and living conditions of foreign workers in the oil palm plantations of Sabah region of Malaysia. Some of the efforts can in the form of: NGOs can serve as enablers of the partnership via setting supportive model. NGOs, via community teaching, may awaken latent local champions that may act as spokespersons for the community, take over the leadership responsibility as well as drive through the partnership.

NGOs may guarantee that the objectives of the key stakeholders are jointly compacted as well as comprehensive by the sides. They can provide capacity building of all stakeholders; intervention and removal of all types of forced or unavoidable labor; respect freedom of association in addition to the right to collective bargaining; support in provide all workers adequate protective equipment free of cost; support in providing sufficient housing, water, health facilities, education, welfare facilities as well as protecting apparatus free of cost for all workers; intervention by the ban of toxic, bio-accumulative pesticides, including all Pesticides which are classified by WHO rank 1A or 1B or which are listed by the Stockholm or Rotterdam Conventions, as well as Paraquat; intervention into making provision realistic working hours in addition to progress just before payment of living wage; apply ethical recruitment with no cost for

workers or attack of personal documents; setting up lawful openings as well as clear complaints machinery, reliable with global best practices; commitment to meaningful transparency and disclosure of all plantation processes; the society, its spokespersons as well as mediators such as NGOs may play a significant role in awareness raising, support, decision making, execution as well as course of action in addition to preservation of the infrastructure amenities; promoting interaction: non-government organizations utilizes interpersonal approaches of conversation, as well as examine the correct entrance point whereby they can expand the confidence of the community they intend to benefit; NGOs may likewise have good notion of the possibility of the projects they take up; the importance of the responsibility of the government, data about the lives, abilities, mind-set as well as cultural uniqueness of people at the local level; non-governmental organization may promote upward interaction from people to the government as well as downward from the government to the people.



Communication upward entails notifying the government concerning the local people thoughts, doings, as well as feeling whereas communication downward entails notifying local people concerning government plan for them. NGOs likewise are in distinctive position to distribute information horizontally and networking among other organizations doing comparable task; Advocacy for and with the poor Occasionally, nongovernmental organizations turn out to be representatives or ombudsmen for the underprivileged as well as making effort to influence government plan in addition to programs on behalf of the poor. This may possibly be done via different channels varying from exhibition, direct

projects to involvement in public discussion as well as the creating government policy in addition to plans to advertising research outcome and case studies of the underprivileged.

Hence, non- governmental organization play a significant role from campaigner for the poor to execution of government programs; from agitators as well as critic to partners in addition to counselor; from sponsors of pilot projects to intermediaries; supporting innovation, demonstration and pilot projects: non-governmental organization have the benefit of selecting specific location for novelty project as well as identifying in advance the length of time which they will support the project- prevailing over few of the deficiencies that the government encounter in this regards. NGOs may also be pilots for larger government project by virtue of their ability to respond more rapidly than the government bureaucracy; technical help as well as training; Training intuitions as all as non-government organizations can build up technical help as well as training ability thus using it to help both plantation management and the government; and research monitoring in addition to assessment: novelty programs are required to be cautiously established and share- efficient involvement monitoring may allow the sharing of outcome with the citizens and the workers.

5.3 Limitations

Even though this study sought to highly contribute in the areas, explore and examine, the following limitations cannot be avoided as detailed below.

The topic selected for the study is too sensitive for data collection. Hence, there is high resistance from the plantation management in the data collection on the working and

living conditions of foreign laborers. There is high resistance from the foreign workers working in oil palm plantations in the data collection stage, since they fear plantation management and thereby do not disclose the facts related to their working and living conditions.

Since this study is dealing with foreign workers, difficulties that aroused when dealing with sample respondents are noted. Though this particular research tried to gather representative sample size from small and medium plantations, more varied finding will be obtained with wider sample size. More intervening variables like trust, gender, legal framework, country of origin etc, might yield better satisfactory observations with the present model.

5.4 Recommendation for future research

This particular research was undertaken to ascertain the relationship between ethical work climate and psychological contract with job stress and workers intention to leave in oil palm plantations with the support of proper measurement tools which were seldom applied so far in the oil palm plantations. Majority studies so far conducted with support of qualitative researches. This particular study established adequate relationship between antecedents with job stress and intention to leave in 127 small and medium scale oil palm plantations. Considering the sensitivity of the topic and its scope at the national level, the study recommends further research with more sample size. The study covered 397 workers of small and medium scale oil palm plantations. Better variation in output may be resulted in case, future study incorporate more sample size. Further, the study also

recommends upcoming research in the same area of workers intention to leave should in corporate large scale oil palm plantation also.

Certain demographic factors like gender, size of the plantations, age, marital status, country of origin may exert wider relationship between antecedent of job stress and intention to leave. Hence, future study needs to be conducted with the incorporation of social demographic factors as moderators.

5.5 Conclusion

This particular research was conducted to explain the factors correlated to working and living condition of oil palm foreign workers and to what extent it influence the job stress and intention to leave. Several allied factors were also identified by the researcher, in association with the nature of the job and demand generated which include, ethical work climate and psychological contract which clearly explain collectively as multi-causative factors leading to worker intention to leave oil palm plantation in the Sabah region of Malaysia.

This study tried to explain factors leading to workers intention to leave from oil palm plantation in Malaysia with theoretical footing of the Social Exchange Theory and Job Demand and Resource theories (JDR). The result of the study clearly indicated that these parameters have direct relationship to workers intention to leave the oil palm plantation, explaining the wider issue of labor shortages and employment of foreign workers in the oil palm plantations. Major causative factors identified by the researcher under precarious working conditions includes issues related to minimum wages, contract labor, safety and

security, poor hygiene, poor housing facilities, lack of transportation facilities, no medical facilities, remote location, lack of opportunity for education of workers children and no welfare facilities. The foreign workers have very low level appreciation on all these factors leading to workers decisions not to stay back in oil palm plantation work.

In relation to unethical work climate, several factors have been pointed out by the workers leading to workers intention to leave oil palm plantation. Several unethical work practices are widely observed by the workers in the oil palm plantations which can be associated with human rights violation. Physical and mental harassment at work by the small and medium scale plantation management and the mandors at work are forcing the workers not to stay back in oil palm plantations. The workers are exposed to insecure work environment with higher job demand and with unsafe job resources which make them feel insecure to continue plantation work. As such, neither the rules nor regulation of the government nor the plantation management's labor concern approach are supportive enough to continue the workers in remote locations. The workers are forced to make a choice to leave oil palm plantation job.

Though, the government had made several laws to protect foreign laborers working in agriculture jobs, the result of the study indicate that such laws are insufficient to protect and provide appreciate working and living conditions to the workers. As such, the workers are under contract labor, whom are recruited by the agents and mandor's, they are fully under the control of plantation management devoid of the scope of labor laws. Hence, a psychological contract between workers and employer where less observed in

the study explaining its close association with job stress and workers intention to leave from the small and medium oil palm plantations.

All the causative factors which are connected to workers intention to leave from oil palm plantations such as ethical work climate and psychological contract are clearly explained by this research with the fundamental based on the Social Exchange Theory and Job Demand Theory. With the fundamental footing of theory of Job Demand and Resource (JDR), this particular research explained job stress. Due to lack of opportunity for mechanization and the work performed with poor equipment and supportive facilities, the workers are exposed to heavy job stress which leads to their intention to leave. The unethical working is leading to work stress with the precipitated symptoms of physical and psychosocial illness clearly explaining the reason behind workers intention to leave oil palm plantations. All the variables identified in this research are relevant to have effective intervention for plantation management, government and non-government organization. The study thus keenly support the factors identified in this research as the determinants of job stress and foreign workers intention to leave among oil palm foreign workers.

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Appendix

Table 3.11 *Dependent variables*

Statements	Code	(ILI)
Intention to leave (ILI)	ILI1	0.59
	ILI2	0.82
	ILI3	0.87

Variance

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.911

Approx. Chi-Square = 1521.96

DF = 95

Sig. = 0.000

Variance = 72.661

Table 3.12 *Dependent variable*

Statements	Code	5(JS)
Job Stress (JS)	JS1	0.69
	JS2	0.59
	JS3	0.41
	JS4	0.57
	JS5	0.60
	JS6	0.42
	JS7	0.53
	JS8	0.56
	JS9	0.61

JS10	0.41
JS11	0.59
JS12	0.54
JS13	0.60
JS14	0.55
JS15	0.66
JS16	0.54
JS17	0.60
JS18	0.53
JS19	0.62
JS20	0.56
JS21	0.69
JS22	0.57
JS23	0.55
JS24	0.52
JS25	0.53
JS26	0.55
JS27	0.60
JS28	0.59
JS29	0.53
JS30	0.58
JS31	0.57



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Variance

Kaiser-Meyer-Olkin Measure of Sampling Adequacy = 0.901

Approx. Chi-Square = 1425.11

DF = 95

Sig. = 0.000

Variance = 71.001

Table 3.13 *Independent variable*

Statements	Code	5(JS)
Ethical Work Climate (EW)		
	EW1	0.81
	EW2	0.83
	EW3	0.78
	EW4	0.78
	EW5	0.82
	EW6	0.68
	EW7	0.43
Psychological Contract (PC)		
	PC1	0.69
	PC2	0.76
	PC3	0.74
	PC4	0.86
	PC5	0.80