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**THE RELATIONSHIP AND EFFECT OF ROLE OVERLOAD,  
ROLE AMBIGUITY, WORK-LIFE BALANCE AND CAREER  
DEVELOPMENT ON WORK STRESS AMONG CALL CENTER  
EXECUTIVES OF BUSINESS PROCESS OUTSOURCING (BPO)  
IN SELANGOR.**

**KAVITHA D/O VENUGOBAL**



**MASTER OF HUMAN RESOURCE MANAGEMENT  
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## ABSTRACT

Work stress is a global issue that keep rising among the working adults. The fast growing business pace has created a highly demanding and stressful working environment. Work stress is a phenomena that is extremely threaten for both organization and employees. Consequently, this research is aim to identify the contributing factors of work stress to recognize the effect of highly influencing stressor among call center executives of BPO in Selangor. The four independent variables of this study which consist of role overload, role ambiguity, career development and work-life balance are analyzed to determine the relationship with dependent variable of work stress. Besides, this research had utilized cross-sectional study. The total 152 of respondents are was involved in this study. Data collection was carried out by distributing questionnaires. Additionally, the collected respondents was analyzed by Statistical Package for Social Science (SPSS) version 17.0. The research analysis are consist of descriptive statistics, reliability analysis and inferential analysis to identify the relationship among the independent and dependent variables. The multiple regression analysis shows that role overload ( $r = .794^{**}$ ,  $n = 152$ ,  $p \leq 0.00$ ) and role ambiguity ( $r = .251^{**}$ ,  $n = 152$ ,  $p \leq 0.00$ ) has a positive and significant relationship on work stress. Besides that, work-life balance ( $r = -.183^{*}$ ,  $n = 152$ ,  $p \leq 0.05$ ) and career development ( $r = -.166^{*}$ ,  $n = 152$ ,  $p \leq 0.05$ ) shows a significant and negative relationship on work stress. As overall all, role ambiguity, role overload, career development and work-life balance effect work stress by 65.1% as the  $R^2$  value is .651. The study findings shows that role overload are highly significant as the beta value is .784,  $p \leq 0.00$  which contributing work stress among call center executives in BPO that located in Selangor. Career development is the second highest beta value. .209,  $p \leq 0.45$  that effect work stress. Work-life balance beta value is -.207,  $p \leq 0.45$ . The beta value of .099,  $p \leq 0.77$  shows that role ambiguity has a very low effect on work stress. Moreover, the managerial implication of this study are identified as long working hours and dual processing which are required to be managed in order to control the work stress level among call center executive of BPO in Selangor. Therefore, future research should explore other contributing factors of work stress such as interpersonal relationship and role conflicts. Finally, the research should extend more to other BPO call centers.

*Keywords: work stress, role overload, role ambiguity, career development, work-life balance, business process outsourcing, call center.*

## Abstrak

Tekanan kerja adalah isu global yang terus meningkat di kalangan orang dewasa yang bekerja. Perkembangan pesat dalam kadar perniagaan telah mewujudkan persekitaran kerja yang sangat mencabar dan tertekan. Tekanan kerja adalah satu fenomena yang mengancam bagi kedua-dua organisasi dan pekerja. Oleh itu, kajian ini bertujuan untuk meninjau faktor-faktor yang menyumbang kepada tekanan kerja untuk mengenali pasti faktor yang sangat mempengaruhi tekanan kerja untuk mengurangkan tekanan kerja di kalangan eksekutif yang bekerja di pusat panggilan BPO, Selangor. Empat pembolehubah bebas kajian ini terdiri daripada beban kerja, kesamaran peranan, pembangunan kerjaya dan keseimbangan kerja-kehidupan telah diuji untuk menentukan hubungan dengan pembolehubah bersandar iaitu tekanan kerja. Selain itu, kajian ini telah menggunakan kajian keratan rentas. Seramai 152 responden telah terlibat dalam kajian ini. Pengumpulan data telah dijalankan dengan mengedarkan soal selidik. Selain itu, respon yang dikumpul telah dianalisis dengan menggunakan Pakej Statistik untuk Sains Sosial, versi 17.0 (SPSS). Analisis penyelidikan ini terdiri daripada statistik deskriptif, analisis kebolehpercayaan dan analisis inferensi untuk mengkaji hubungan antara pembolehubah bebas dan bersandar. Analisis menunjukkan bahawa beban kerja ( $r = .794^{**}$ ,  $n = 152$ ,  $p \leq 0.00$ ) dan kesamaran peranan ( $r = .251^{**}$ ,  $n = 152$ ,  $p \leq 0.00$ ) mempunyai hubungan yang positif dan signifikan dengan tekanan kerja. Selain itu, keseimbangan kerja-kehidupan ( $r = -.183^*$ ,  $n = 152$ ,  $p \leq 0.05$ ) and pembangunan kerjaya ( $r = -.166^*$ ,  $n = 152$ ,  $p \leq 0.05$ ) menunjukkan hubungan yang signifikan dan negatif dengan tekanan kerja. Beban kerja, kesamaran peranan, pembangunan kerjaya dan keseimbangan kerja-kehidupan menyumbang kepada tekanan kerja sebanyak 65.1 % ( $R^2 = .651$ ). Keputusan kajian ini juga menunjukkan bahawa beban kerja sangat signifikan sebab nilai beta adalah .784,  $p \leq 0.00$  dimana iaiya menyumbang tekanan kerja di kalangan eksekutif yang bekerja di pusat panggilan BPO di Selangor. Pembangunan kerjaya mencatatkan nilai beta kedua tertinggi iaitu .209,  $p \leq 0.45$ .

Keseimbangan kerja-kehidupan mencatatkan nilai beta sebanyak -.207,  $p \leq 0.45$ . Nilai beta .099,  $p \leq 0.77$  menunjukkan bahawa kesamaran peranan mempunyai kesan rendah terhadap tekanan kerja. Selain itu, implikasi pengurusan kajian ini adalah waktu kerja berpanjangan dan pemprosesan berganda yang perlu diuruskan untuk mengurangkan tahap tekanan kerja di kalangan eksekutif yang bekerja di pusat panggilan BPO di Selangor. Oleh itu, kajian masa depan perlu meneroka faktor lain yang menyumbang tekanan kerja seperti hubungan interpersonal dan konflik peranan. Akhir sekali, kajian ini perlu dilanjutkan kepada pusat panggilan BPO yang berlainan.

*Kata kunci: tekanan kerja, bebanan peranan, kesamaran peranan, pembangunan kerjaya, keseimbangan kerja-kehidupan, BPO, pusat panggilan.*

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## LIST OF ABBREVIATIONS

Description of Abbreviation	Abbreviation
Business Process Outsourcing	BPO
United Nation	UN
Standard Deviation	SD
Kaiser Meyer Olkin	KMO
Mean	M



# CHAPTER 1

## INTRODUCTION

### 1.1 Background of the Study

Stress is a mental and physical reaction that becomes a part of every human's daily life. Stress at workplace is also known as work stress that commonly used interchangeably in most literatures and past researches which consist of job stress, occupational stress, and work related stress. Based on a study conducted by Sheraz *et al.* (2014) stress is defined as a situation whereby there is a physiological and psychological imbalances due difference among situational request and capacity or energy that the people is required to handle with those requirements. Work stress is one of the main concerns that faced by every employee in this modern world. The fastest growing business domain had created a demanding work environment in most of the organizations. Technology advancement also had increased the employee's requirement to cope with the changes. High demand requires high coping level of the employees.

Job stress is determined as a human's physical and mental responses or feedback of changes or certain environment. Occupational stress may result from several factors including, psychological, physical and environmental. According to Lehrer *et al.* (2009) it is found that severe and lasting physical factors, psychological condition and social stressor are contributing stress. Work stress arises among the employees due to stressor such as heavy work overload, lack of job security, interpersonal relationships in the workplace, role conflict and travelling stress. Stressors has been recognized as impacting the female and male employee's health (Days & Livingstone, 2001). Work related stress may vary and the stress level is different based on the job type, job requirements and employee's capability to absorb. Stress across different occupations

and roles has been discussed in many research with a number of different occupations being described as facing stress on the above average level, for instance, study of stress among teachers and nurses (Surinder, 2011; Wu *et al.* 2007). Especially, stress level in the Business Processing Outsourcing (BPO) industry differs compared to other industries as the job nature is based on client's needs.

Business process outsourcing (BPO) is the fast growing industry that accommodates the current business needs which focuses on cost saving. BPO encompasses outsourcing of the non-core activities like payment services, wellness program and call center (Latha & Panchanatham, 2010). Malaysia also had joined the list of the top BPO destinations along with India, Philippines and China (Mike, 2015). Malaysia become one of the BPO destiny that mainly centralized and located in Selangor and Kuala Lumpur. BPO companies in Malaysia are increasing from year 2012 and the income fetched by BPO industry was RM 5 billion (Mike, 2013). Business Process Outsourcing is one of the most preferable employment source for the youngsters, though employees are unable to be retained for a longer period in the employment as the level of stress is very high and it leads to health problem. Business process outsourcing companies had created a highly demanding working environment which involve unrealistic work demand, poor working conditions, work-life conflict and career development. Business process outsourcing industry unable to retain their employees for long term employment due to occupational stress that need to be minimized.

The major intent of this study is to identify the relationship and effect of role overload, role ambiguity, career development and work-life balance on work stress among call center executives in Business Process Outsourcing (BPO) Industry in order to minimize

the stress level. A call center can be termed as a workplace where the business operating with the support of computer and telephone-based advances that manage the incoming calls or allocation of outgoing calls to available staff, and permit customer and employee communication to occur parallel with the utilization of display screen equipment and the instant access to, and inputting of, information (Holman, 2003). Call center handles calls from numerous clients as the business nature are outsourcing. The working environment and work strain in the call center is differ compared to other business organization that operating on traditional process or administrative. Call center executives are required to be more committed both mentally and physically. The work strain in a call center can be listed as night shift, long hour work, call monitoring, poor work quality and angry customers.

Occupational stress potential to contribute organizational incompetence, increased health care cost and reduce employee's performance. Prolonged work stress has directly led to negative impact to individuals and organizations in terms of productivity, health, cost and performance. Work related stress will produce a poor work life for an employee. According to the fourth edition of the European Working Survey that carried out in 2006, shows that 22% of European employees are encountering spinal pain, exhaustion and muscular pain owing to stress. Work stress are also linked with a few health issues that consist of cardiovascular diseases (Kivimaki & his associates, 2002), neck-shoulder-arm-wrist-hand issues (Arien & his associates, 2001), and musculoskeletal disorders mainly backbone difficulties (Hoogendoorn & his associates, 2000). There are inadequate studies that analyzing the work stress among BPO call centers in Malaysia. Therefore, this study will enable the management to identify the relationship and effect of role overload, role ambiguity, career development and



work-life balance on work stress among executives in the BPO call centers that located in Selangor. This investigation will enhance the organization's ability to recognize the most influencing factor of work stress and to draw the stress management strategy.

## **1.2 Problem Statement**

Job stress level is increasing among working adult within the organization and it is a very common problem that faced by employees in most of the industries, especially in business process outsourcing that operates on customer needs. The prime reason of why employees in BPO facing work stress in their daily working life are due to continuously engage in calls, communication with customers and need to meet the standards, poor career development, and tight datelines makes the employees frustrated and stressful. According to a global workplace provider which known as Regus, had conducted a study that covered the suppositions of 20,000 senior administrators and entrepreneurs crosswise over 95 nations, had identified that 48 percent of the Malaysian respondents felt their stress levels had risen and more than 42 percent reported that they getting less sleeping due to work worries (Department of Occupational Safety and Health, 2013). This issue should not be ignored by the management in consideration of the impact. Lee (2013), stated that unchecked stress level could lead to problems such as depression or even attempts to commit suicide.

Call center executives are the pillar of the business process outsourcing (BPO) call centers that operating to manage the client's noncore business process or services. The employees are functioning as the hands on employees who accomplish the organization's assignment. BPOs operating on a very big scale that servicing a quite number of clients in order to enjoy the benefits of big scale operation which able to

support the client's needs with low cost and high quality. Call center executives (CCE) that working in BPO are exposed to a very different environment such as heavy workloads, ambiguous, shifts, strict performance materials and high management expectation. Call center executives in BPO are commonly assigned on 24/7 shifts. Based on UN report (2010) on outsourcing jobs, it is found that BPO workers are suffering from higher-than-normal stress levels. The pressures from industry to cut costs also had led to a high rate of staff turnover. Various studies that conducted previously had summarized call center as a distressing working environment such as following researchers (Patel, 2008; Mulholland, 2002; Aziz, 2012).

Previously, many studies had been conducted on work stress. A research conducted by Rahman *et al.* (2013) shows that there are many contributing factors of work stress had been identified include long working hours and work burden. Physical working environments are also triggering stress that comprises of noise, poor lighting, low or high temperature, less space for employees, ineffectively managed working environment, improper rotation of air, poor office building arrangement, exposure to unsafe machinery and lack of entertainment facilities (CUPE, 2003). According to CUPE (2003) the main sources of job stress consist of heavy job request, challenging targets, insufficient coaching, insecurity, organizational politics, hostile management, rough working conditions, multiple boss, monitoring and low self-esteem among employees.

Past researchers also had identified some factors that associated with work stress in call centers such as lack of job control, role stress, performance monitoring, insufficient coaching and training, emotional labour, and lack of team leader support that may cause

depression, emotional exhaustion, and tension (e.g., Holman, Chissick, and Totterdell, 2002; DeRuyter, Wetzels, and Feinberg, 2001). This study concentrate on few selected variables from pass studies such as role overload that explains about the degree to which a person who is overburdened with time pressure, commitments and responsibilities will contribute to work stress. Limited studies had been conducted on work stress in BPO Malaysia. Therefore, role ambiguity, work-life balance and career development will also be analyzed in order to identify the relationship and effect on work stress specifically in the BPO industry.

### **1.3 Research Question**

According to the discussion above and to accomplish the aim of this study, four research questions are established:

1. Is there a relationship between role overload and work stress among call center executive of BPO industry in Selangor?
2. Is there a relationship between role ambiguity and work stress among call center executive of BPO industry in Selangor?
3. Is there a relationship between career development and work stress among call center executive of BPO industry in Selangor?
4. Is there a relationship between work-life balance and work stress among call center executive of BPO industry in Selangor?
5. What are the effects of role overload, role ambiguity, work-life balance and career development on work stress among call center executives in BPO industry in Selangor?

#### **1.4 Research Objective**

The foremost objective of this study is to identify the relationship and effect of role overload, role ambiguity, career development and work-life balance on work stress in the call center of Business Process Outsourcing (BPO) industry. Deliberately, the detailed objectives of this study are as follows:

1. To investigate the relationship between role overload and work stress among call center executive of BPO industry in Selangor.
2. To investigate the relationship between role ambiguity and work stress among call center executive of BPO industry in Selangor.
3. To investigate the relationship between career development and work stress among call center executive of BPO industry in Selangor.
4. To investigate the relationship between work life balance and work stress among call center executive of BPO industry in Selangor.
5. To investigate the effects of role overload, role ambiguity, work-life balance and career development on work stress among the BPO call center executives in Selangor.

#### **1.5 Significant of Study**

This study aim to recognize the relationship and effects of role overload, role ambiguity, work-life balance and career development on work stress among call center executives in Business Process Outsourcing (BPO). This study will explore the influence of four main aspects that consist of role overload, role ambiguity, career development and work life balance towards work stress. Examining this four independent variables, the findings in this research will develop the basic knowledge in the area of occupational stress studies. Based on practical insight, the findings from this study would be helpful

and valuable for both the organizations and also for future reference. This study predicts to highlight the most influential stress factor among the four variables for call center executive in the BPO. Therefore, this study will provide basic knowledge to minimize the occupational stress by identifying the influential stressor.

Relationships and effect among four independent variables and work stress will be analyzed in this study. The outcomes of this research are expected to deliver information and details for future theoretical studies on occupational stress in the BPO call centers. Questionnaire that constructed will serve as an insight information which will enable the organization to identify the source and effects of workplace stress. This study will highlight the most influential stressor which need to be minimized for effective stress management strategies to lessen the impact towards the employees and organization. The outcome of this research also will provide a valued information on occupational stress and stress management. This study specifically to identify and provide information on the stressor for call center of the BPO industry. This research also will enable researchers understanding on why work stress in the BPO industry is very high. Even though there are many studies had been done to examine the factors of work stress but less study conducted in the BPO call centers, Malaysia.

### **1.6 Scope of the Study**

The scope of this study is Call Center of Business Process Outsourcing (BPO) that is located in Selangor. The main reason why Call Center of Business Process Outsourcing (BPO) industry chosen for this study because it is a fast growing business and had created job opportunities for the most of the young generations in Selangor. According to Kearney (2004), Malaysia's successful performance in BPO industry is the result of

low costs for infrastructure and the strong score in business environment for an emerging market. David (2014), stated that BPO industry had created 54,000 jobs in 2013 across Malaysia. Five BPO call centers are approached to conduct the study. Though only Symphony BPO Solutions Sdn Bhd and Aegis BPO Solutions Sdn Bhd are responded to participate this study. The independent variables are consist role overload, role ambiguity, career development and work life balance. While, the dependent variable is work stress. However, the outcome of this study is associated with Business Outsourcing Process (BPO) call center industry.

### **1.7 Organization of the Thesis**

In the first part of chapter 1, the introduction had given in the overview of the topics. Additionally, followed by the background of the study, problem statement, research questions, research objectives and significance of the study and scope of the study had been recognized and described in this chapter. Chapter 2 will cover the literature review on the dependent variable of work stress and the independent variables (role overload, role ambiguity, career development and work-life balance) of previous researches were analytically investigated. Chapter 3, explain the methodology applied in the present study. This chapter highlighted the theoretical framework, hypotheses development, measurements and statistical tools that were used. In chapter 4, the data investigation and outcomes of the study were explained. Chapter 5 will discuss the managerial implications, recommendation for future study, limitations and the conclusion.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter discuss about the various research reviews related to this study. The factors that influence work stress (dependent variable) among call center executives were discussed in this chapter which consist of role overload, role ambiguity, career development and work life balance (independent variables).

#### 2.2 Work Stress

Work stress is the phenomena that most of the working people faced in their workplace. Rollinson (2005), working environment stress is the situations that develop from the interface of individuals and their employment that caused due to the changes within people that differ them from their normal functioning. Deshpande (2012), based on NIOSH record, 80% of the employees are facing work stress. Stress is basically termed as the adaptive reaction towards the surroundings that lead to psychological, physical and causes behavioral deviations for organizational members (Statt, 2004). According to Skakon *et al.* (2010) European Union had recognized the job related stress as one of the big issue in the workplace environment.

Pontes and Kelly (2000) identified that most of the firms requires call center to manage the customer inquiries on billing issues, new accounts, complications on the products or service and product knowledge. National Job Safety and Health Institution had classify job stress as an irritating state that happens when there is an incompatibility between person's desire, job requirements, and person's talents, or worker's resources

and needs. Stress is also known as the interruption for the individual's emotional stability that prompts a situation of inefficiency between personality and the behavior (Nwadiani, 2006). Stress in the workplace is a condition that occurs when an individual is unable to cope with the work mandate that expected towards them. Therefore, job stress rises due to imbalance that occur between the job demands, abilities and skills of an employee to perform the job demands (Blaug, Kenyon & Lekhi, 2007).

Most of the employees perceive that job is the main stress in their life and it is contributed due to several factors such as working long hours. Snow *et al.* (2000) states that fastest growing and modernized working environment caused long working hours, adaptability to change, task complexity and also difficulties for better technical skills. This had created a situation where most of the employee's time is engaged with their work. Employees are exposed to work stressors which aggregate the risk of unpleasant impact the employees' physically and psychological well-being (Snow *et al.* 2003). Authors of stress area of research had argued that stressors can be dangerous issues affecting the employee's physiological and psychological well-being (Landsbergis *et al.* 2001; Idris 2011).

According to Lehrer *et al.* (2009) stress also can be triggered by serious or enduring physical stressors, or by mental and social stressors. Cook & Hunsaker (2011) are also determined that stress are caused due to individual, ecological and organizational variables. Stressors are becoming exclusive to the working women, which includes sexual harassment, lesser chances for professional success and sexual segregation, may adversely influence the females (Street, Stafford, Gradus, & Kelly, 2007). The factors that lead to stress are referred as stressor. According to Larson (2004), stressor is



defined as any response that caused due to external or internal environment that disappoint an individual's stability and for which recovery is required. Work stressor are the factors of work or the organization which can be identified as several variables that causes work stress. Based on few studies conducted on stress at work had recognized many issues such as taking turns, ignoring the personal potential, lack of work and intolerance, overworking, role ambiguity, prejudgment on wage, ambiguity in job security and relationship with colleagues (Giga, Cooper, & Faragher, 2003).

Work stress may affect adversely on both individual and association (Larson, 2004; Malik, 2011). The effects of stress on individual are comprise of nervousness, rest issues, tiredness, insomnia, depression and challenges in deciding important issues (Adeova and Afolabi, 2011; Malik, 2011). Subsequently, work stress is a condition that may lead to several consequences for both individual and organization. According to Williams *et al.* (2004) workplace stress and burn out are interrelated which may lead to negative effects that may harm the employee's mental and physical health of those who is facing work stress. Job stress has been widely linked with opposing effects.

Work stress also can be related to both positive and negative effects which either lead to achievement or harmful effects (Abushaikha & Sheil, 2006). As the work stress effects that is associated with illness and diseases, it is predicted about 100 million workdays are being lost due to stress and approximately 50% to 75% illness are related to work stress (Bashir, 2007). As a result, stress results in high ratio of absence and loss of employment. According to Treven (2002), the percentage of stress in the organization is increasing at a worrying rate, which affects both the employee's performance and organizational goal achievement. High level of work stress can cause

organizational difficulties, such as increased absenteeism rates, low productivity and high turnover, as well as individual employee problems, such as alcohol and drug abuse, and ill-being (Jamal, 2005; Rothmann, Mostert, & Nell, 2008). The American Institute of Stress (2004) for workplace stress of U.S. employers estimated more than \$US 300 billion of organizational cost involved annually in managing work stress. There are also some researches shows relationship between stress and absenteeism, stress and labour turnover (Coetzer & Rothmann 2007; Mostert, Rothmann, Mostert & Nell , 2008).

Few researches has been carried out in Malaysia about work stress among employees of facilities management in commercial complex (Ahmad Ezanee, Zarina, Nurul Ashikin & Rashadah, 2012). Occupational stress has also researched among the male navy personnel base in Lumut, Malaysia (Bokthi & Talib, 2009) and previous research on occupational stress studies among ward nurses in a public hospital in Kuala Lumpur had been done (Yahya, Zainiyah, IM & Chow, 2011). The majority of the researches that has been conducted in regards to work-related stress in call centers has focused on role stressors. Therefore, most of the studies are mainly focusing on role stressor such as role overload, work pressures, role conflict and role ambiguity (Witt, Andrews & Carleson, 2004).

There are few studies conducted in Malaysia to analyze work stress in Call Centers. It has identified that call centers have been one of the most stressful place to work (Mulholland 2002; Wetzels & Feinberg 2001; Peaucelle 2000). Many researches that analyzing work stress in BPO call centers had been carried out in India, China and Philippines (Latha & Panchanatham, 2010 and Lozano-Kuhne, *et al.*, 2012).

Consequently, it is found that limited researches had been carried out on BPO Call Center in Malaysia.

### **2.3 Role Overload**

Role overload is a state whereby the employee is given with quantity of job or responsibility that unable to be completed by the employee due to insufficient time and resources. Role overload is initially termed as a condition whereby the employees are having a lot of work to be completed in the given amount of time. Majority of manager is in a situation to deal with this type of role overload by working overtime in order to complete the task assigned to them (Conley & Woosley 2000). Role overload is a phenomenon which emerges from the weight of extra obligations and duties in the organization. The term role overload comes from the view of “the shared demands executed by numerous roles are so great that time and energy resources are insufficient to effectively achieve the goals of the several roles to the satisfaction of self or others” (Duxbury, Higgins, and Lyons 2008 p. 130).

According to Beehr & Glazer (2005) role overload or workloads are categorized as third form of role stress and it is defined as the amount of work assigned to an employee exceeded the individual’s ability, time pressure and insufficient resources to accomplish the commitment. Complex task environments such in limited spanning roles and role overload is also frequently settled as a procedure of inter-sender conflict. According to Singh (2000), every entity is expected to encounter the potentials of the numerous role sender. Role overload was also thought to be a part of role conflict, such as issue of abilities, resources and time, all were put under the distinctive meanings of role conflict by different authors (Conley & Woosley, 2000). Work overload is different

compared to role conflict (Glisson *et al.* 2006). Excessive workload also will be a barrier to designing a flexible schedule as an employee are required to spend more hours at work place to fulfill the work demand that expected, particularly when employees are worried about losing the job which commonly happen in the post-merger environment (Lee *et al.* 2008).

### 2.3.1 The Relationship between Role Overload and Work Stress

Role overload is caused by excessive demands that placed on the employees, which unable to be completed within the given time period. Role overload or work load is the major cause of work stress (Topper, 2007). According to Johnson *et al* (2005) role demands might be stressful when they are extreme which also known as role overload. Overload is evident in numerous domains, spillover effects often happen. Role overload exists when a person is given over numerous responsibilities or certain roles and tasks with short deadlines. Therefore, role overload results in stress and exhaustion (Conley & Woosley, 2000).

Role overload associated with stress regularly because of tiredness that arise from pressure to handle the set of demand (Posig & Kickul, 2003). One of the foremost reasons of anxiety that caused by role overload because the employees are facing pressure to do more work (Conley & Woosley, 2000). According to Perrewe *et al.* (2005) role overload is commonly connected with job stress, job dissatisfaction and anxiety. The relationship concerning role stressors and the feeling of strain had been established in the literature (Rhoads, Fogarty, Singh, & Moore, 2000; Peiro *et al.*, 2001; Posig & Kickul, 2003). Strain arises mostly because of the exhaustion that results from pressure to fulfill the set of requirements. According to Karimi (2014), there is a

significant and positive relationship between role overload and work stress. In comparison of several work stressors it is acknowledged in the industry that role overload is extensively revealed to be one of the main elements of job stressors (Love and Edwards, 2005; Ng *et al.*, 2005). According to Jamal in 2005 stress is a high when there is inequality among job requirements and employee abilities to handle the situation. Based the on Handbook of Work Stress by Glazer and Beehr (2005), it is clearly written in the summary of role stress research that role overload is the impact of role stress and it can contribute either positive or negative effects.

## **2.4 Role Ambiguity**

Role ambiguity is known as the employees' uncertainty concerning their scope of jobs that they required to perform in the organization (Cho *et al.*, 2014). Role ambiguity is also a state of ambiguous regarding the expectations, behaviors and consequences related to work and job scope (Walsh, 2011). In other words, role ambiguity occurs when a person does not have the important data on the best way to perform the tasks appropriately or is ambiguous on how his or her work standards will be assessed at the end (Karatepe, Yavas, Babakus & Avci, 2006; Karatepe & Sokmen, 2006).

Role ambiguity is a part of any work environment (Verbeke *et al.*, 2011) demonstrating that all the working environment is related to ambiguous and unreliable work conditions (Cicero *et al.* 2010). Role ambiguity also refers to the level of certainty of one's behavior respondents and the clearness of behavior necessities (Glissmeyer *et al.* 2008; Shen, 2005). According to Bandura & Locke (2003) employees who do not get consistent feedback may encounter considerable unclear about their role performance. In addition, role ambiguity exists when an individual's responsibility or power are not

clearly written which lead the person to become fearful to perform or to take responsibility (Jones, 2007).

According to Onyemah (2008), he explained that role ambiguity is the view that one less information that's necessary to execute a job or task. This situation leads the perceiver to feel helpless and ambiguous to perform the job. He added that role ambiguity refers to an employee's ambiguity regarding the expectations of diverse members in his or her role set (Onyemah, 2008). According to Arnold *et al.* (2001) as cited in Management science letter (2013) that states that role ambiguity variable is affecting the job stress variable. Ruyter *et al.* (2001) claimed that role ambiguity occurs in the call center when the call center representatives are unclear about the supervisory desires or when they don't know how their work performance will be evaluated. Role ambiguity in call centers may happen as the employees are unclear of the performance standards that fixed for the employees. Lack of knowledge on the performance standards, expectation and feedback may also lead an employee to role ambiguity. Role ambiguity might also arise due to poor communication within the organization.

#### 2.4.1 The Relationship between Role Ambiguity and Work Stress

Role ambiguity is abstracted as a stressful state due to the employee's uncertainty or ambiguous concerning expectations of the employee's responsibilities (Low *et al.* 2001). A study conducted by Idris (2011), shows that there was a significant, positive relationship between role uncertainty and work stress. These demonstrates that role ambiguity is a condition where employees are in ambiguity, have less knowledge about their responsibilities, objectives, authority and goals of their organization and it increase the level of stress among employees.

Role ambiguity is a situation whereby employees are ambiguous about their work requirements and it is clear that if an employee is uncertain about what he or she are required to do concerning their work, then it can lead the employee directly to have an unclear direction about his or her role in the organization which will result in work stress. Every formal job in an organization chart should have a clear task or role requirements to lessen confusion and increase productivity. Though, some organization structure does not clarify the task requirements and it seems ambiguous (Hamilton, 2002).

Role ambiguity is a state where there is insufficient information or lack of knowledge to perform a task or job. Dwyer and Fox's (2006) argued that role ambiguity is not directly leading role stress if the employees have more role experience and have a clear idea on what is anticipated with their role. The previous studies conducted shows that role ambiguity lead to work stress as positive relationship. In summarization, the unclear situation of employees regarding the job that they supposed to perform will create pressure among the call center executives that lead to work stress in the BPO industry.

## **2.5 Career Development**

Career development can be described as the prospects for the employees to grow with the job and organization to develop individual competence level. According to Patton & Mahon (2005) he define career development is the progression of handling life, learning, and work over the lifespan. Career development includes offering chances or prospects for promotion within an organization and offer training and skill development

programs that enables the employees to develop their employability on the internal and the external labour market (Meyer & Smith, 2000). Career are also described as the lifestyle that contained of an order of work or leisure activities throughout in a person's lifetime. Career development is a path that starts when a person entered into the organization. Career development is also known as an ongoing, formal process by an organization that emphasis on enhancing and inspiring the employees in regard to both employees and the organization's needs (Byars and Rue, 2004).

Career development path or opportunities are depending on the organization's resource availability. Bober (2005), cited that every employee in the organization must get be given opportunity to develop their career. Few researchers had debated that coaching/counseling, training, job rotation, sabbaticals and short tasks are the main career development interventions that mostly used (Zin, Shamsudin, and Subramaniam, 2013; Raduan, 2002; Olorunsula, 2000 and Wan, 2001). According to Byars & Rue (2004) the main aims of career development is to achieve the current and future human resource needs of the organization on a timely manner, to better inform the organization and the individual about potential career paths within the organization. Additionally, aim to apply present human resource programs to the completest by adding the activities that select, allocate, advance, and manage the individual careers with the organizations' plans.

#### 2.5.1 The relationship between Career Development and Work Stress

Career development is the opportunities for the employees to grow with the company growth. Employees those who was not given an opportunity to enhance the potentials will face work stress. Sutherland and Cooper (2000) had conceptualized career



development as a wellspring of stress in terms of under-advancement, job insecurity, over-promotion and slowed down aspiration. According to a study conducted by Michie (2002), it is identified that career development has relationship with work stress as a contributing factor of work stress. Consequently, this will lead the individuals suffering from “career stress” and they are likely to show high frustration, job flexibility, exhaustion, poor work performance, and less effective interpersonal relationships at work (Ivancevich and Matteson, 2002).

Career development is one of the stressor that led to work stress. Lack of attaining the anticipated career opportunity is the main reason for work stress. Career development is associated with poor promotion policies, job insecurity and poor pay within the organization (Sverke and Hellgren, 2002). Based on the studies conducted among construction workers by Loose and Waters (2004) it is identified that poor pay has a direct relationship to increases the levels of work stress.

## **2.6 Work Life Balance**

Work life balance is a circumstance where an employee is able to alter their work and personal life without battle. Frequently work-life balance is known as lack of conflict between work and family or individual roles (e.g., Quick, *et al.* 2004; Frone, 2003). According to Grady *et al* (2008) work-life balance is essential for organization’s performance, peoples’ wellbeing, and a functioning society. Work-life balance is particularly essential when an organization has to supervise very specialized professional as their high responsibility and loyalty is needed for the success of the organization (Scholarios & Marks, 2006). Work life balance known as the competence

to plan the hours of an individual professional and personal life so as to lead a healthy and peaceful life.

Work life balance focuses on the values, attitudes and beliefs of women concerning their age to work in establishing and balancing their work and personal life (Lakshmi & Sujatha, 2013). Employees need to balance work with their personal roles. Hence, employers requires the employees to balance their work and life as it helps to enhance productivity and decrease cost (Abbott & Cieri, 2008). There is no constant meaning of work-life balance, there are some solid topics which have developed which included the employees that meeting an acceptable balance between their work and personal lives, employers work initiative which would aid improve employees productivity providing a range of directed work-life activity that enhance firm performance and not result into considerable increment in cost to the employers (Cieri, Holmes, Abbott & Pettit, 2005; Cieri & Bardoel, 2009).

Higher work-life balance and lower work-life problems are connected with job fulfillment, lower turnover intention, volunteer commitment (OCB), enhance diversity, equity and productivity (Allen, Herst, Bruck, & Sutton, 2000; Balmforth & Gadner, 2006. Waltman & Sullivan, 2007). Some studies had examined significant powerful forecasters of work-life balance and work-life conflict. Work-family interface is considered by numerous mechanisms that bond the domain of work and the domain of the family such as segmentation, resource drain, spillover, compensation, congruence and conflict (Edwards & Rothbard, 2000) as also work-family simplification (Grzywacz & Marks, 2000) and work-family enrichment (Greenhaus & Powell, 2006).

### 2.6.1 Relationship between Work-life Balance and Work Stress

Work life balance experienced by an employee when they are able to balance both work and life without conflicting each other. Based on drawing of Spillover theory by Zedeck, the study hypothesized that high levels of observed job pressure stress and job threat stress would forecast improved levels of work-life struggle, and declined levels of work-life balance. Mohan and Ashok (2011) explained that stress is frequently established when an individual is allocated a main accountability without appropriate power and allocation of power, interpersonal influences such as group cohesiveness, functional dependence, communication frequency, relative authority and organizational difference between role sender and forcal persons. Work holism is associated with work stress and work-life imbalance, regardless of gender (Aziz and Cunningham, 2008).

Job performance of an individual is also effected by the stressor contained of non-working role (e.g family, friends, health, and financial situations). Work-life balance and job stress goes at the same time one to another. Employees give importance on pairing their lives and the effectiveness of workplace practices and policies in supporting them to accomplish such a goal (Ross & Vasantha, 2014). Vijaya Lakshmi *et al* (2013), has studied and identified the problems of women faculty working in educational institutions. It is also determined that women faculty members suffered severe stress in the process of reaching work life balance.

## 2.7 The Underpinning Theory

### 2.7.1 Lazarus Appraisal Theory

Lazarus appraisal theory is proposed by Richard Lazarus in year 1991. According to Lazarus (1991), stress is referred as a relational idea. Stress is not defined as the external

stimulation. Vice versa, stress is the relationship between individuals and their environments. Lazarus and Folkman (1984) describe that an exact occasion or stressor impacts a person's discernments of an occasion and labeled performance evaluation. This theory explained that emotions are the results of a person's logical justification or evaluation of important occasion or circumstances. Latest study of Lazarus (1999), explains judgment is the assessment to evaluate the work environment. The concept of appraisal is presented in emotion research by Arnold (1960) and explained in further in regards to stress processes (Lazarus 1966; Lazarus and Launier (1978). The appraisal concept is necessary to describe individual dissimilarities in terms of quality, intensity, and extent of a stimulated emotion in environments that are objectively equal for dissimilar individuals.

Lazarus appraisal theory posits are divided into two types which is primary appraisal and secondary appraisal (Lazarus, 1991). Primary appraisal is the individual's assessment of an event or situation as a possible harm to his or her well-being. On the other hand, secondary appraisal is the individual's evaluation of his or her capability to manage the event or situation (Lazarus, 1999). Appraisal theory is associated with on how individuals primarily evaluate the potential harm he or she will encounter on an event or situation and it also the main source of stress in the workplace. Secondary appraisal theory can be linked to how each individual in the workplace assesses the ability of themselves on managing or handling the event or situation.

Role ambiguity and role overload are two factors that categorized as role stress. Role ambiguity is a state whereby the employees unclear with their role in their organization. Primary appraisal theory explain how an employee evaluate the ambiguous situation.

Secondary appraisal refers to how employees perceive them able or unable to handle the ambiguousness in their role which can contribute work stress. Role overload refer to high load of work that unable to be completed due to lack of time or resources. Every employee will evaluate the excessive work load differently as harm or challenge. If the employees unable to cope with the heavy work load, it may lead to work stress.

Primary appraisal of poor work-life balance can be referred as struggle between work and life. Employees will started evaluate whether the work conflicting life or not. Imbalance between work and life in secondary appraisal may contribute to job stress. Career development is one of the factors that taken into consideration in analyzing work stress. The term career development refers to opportunities for learning, development and career growth in the workplace. Employees in the primary appraisal will appraise the career development opportunities that available in the workplace. Lack of career development opportunities or career path may lead to dissatisfaction which in long term might turn into workplace stress. Lazarus appraisal theory can be associated with factors of work stress which consist of role overload, role ambiguity, career development and work-life balance. Lazarus appraisal theory explain that work stress occurs when an individual is unable to handle and cope with an event or situation.

Generation differences among employees also can differ the level of stress that the employees are facing and it can be associated with primary and secondary appraisal. Majority of current workforce are consist of generation X and Y. Generation X is those who born between the years 1961 to 1981 (Stuenkel *et al.* 2005). Generation X is identified as independent, creative, confident and comfortable with any change or new technology (Boychuk-Duchscher & Cowin 2004). Generation Y employees are 50% of

the Malaysian workforce (Coopers, 2012). Gen Y is known as the generation that born between year 1982 to 2000 and entering workforce starts from 2002. This generation is very confident, high self-esteem independent, goal-oriented and it savvy. In 2016 a study conduct in UK to identify the level of stress among generations. A study conducted by Willis (2016), shows that Gen Y is facing high level of work stress. Current generation also known as Millennials are more concerned about their finance, lack of work-life balance and low pay compared to the older generations. Gen Y are facing high level of stress in the workplace. Lazarus appraisal theory can be associated with how different generation are evaluating the situation and their perception in handling the situation.

## **2.8 Summary**

This chapter has described the literature review that emphasizes on the relationship between role overload, role ambiguity, career development, work-life balance with work stress. Furthermore, following chapter of this study will discuss in detail of the methodology that used for data collection and analysis in this research.

## **CHAPTER 3**

### **METHODOLOGY**

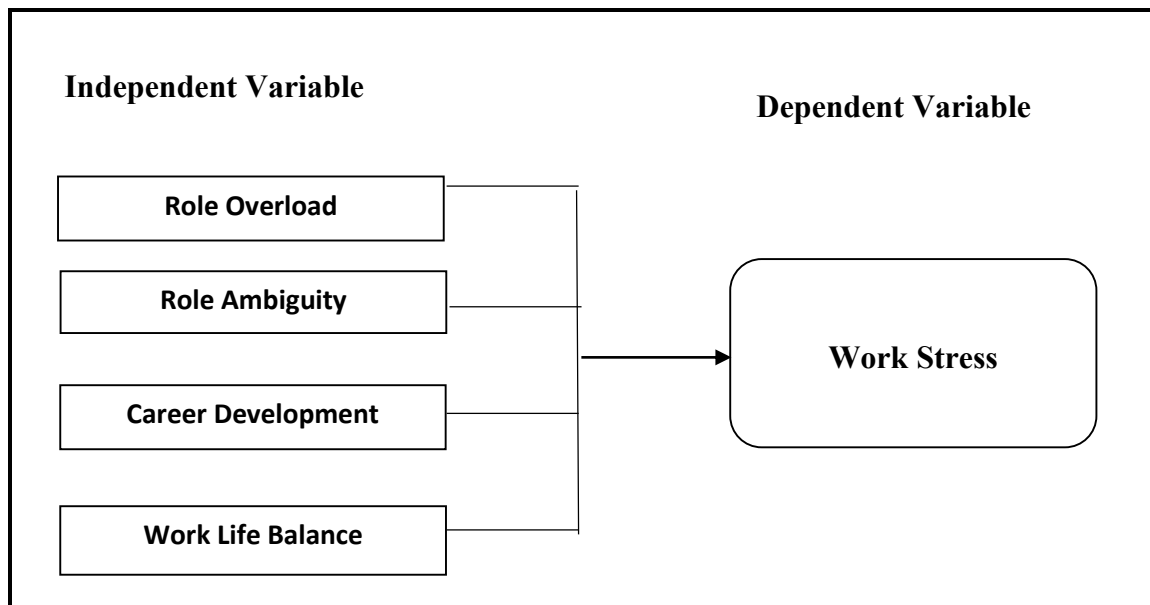
#### **3.1 Introduction**

This section describes the research design and method that used to attain the vital information to answer the research questions. The goal of this study is to determine the relationship between role overload, role ambiguity, career development, work-life balance and work stress among call center executives in business process outsourcing (BPO) industry in Selangor. This chapter will clarify on the research framework, hypotheses development, research design, measurement of variables, population and sampling, pretest, data collection procedures and techniques of data analysis.

#### **3.2 Research Framework**

Figure 3.1 demonstrates the theoretical framework of this study will be demonstrated with Lazarus Appraisal Theory (1991). This research framework developed by research objectives and adopted from previous research. There are four independent variables for this studies which consist of role overload, role ambiguity, career development, work life balance and one dependent variable which is, work stress. The theoretical framework of this study is underpinned by the Lazarus Appraisal Theory. According to Lazarus and Folkman (1984), this theory will analyze the compatibility between environment and individual ability to assess the potential harm and capability to handle the situation. Lazarus appraisal theory can be categorized as primary and secondary appraisal to identify the capability of an individual to handle the stressful situation. Therefore, these theory can be associated to this research to further understand the relationship between role overload, role ambiguity, career development, work-life balance and work stress.

**Figure 3.1**  
*Theoretical Framework*



### 3.3 Hypothesis Development

There are four hypotheses proposed for this study:

A research conducted by Karimi *et al.* (2014) is supporting that there is a relationship between role overload and work stress. Based on a research carried out by Yongkang *et al.* (2014) shows that role overload to have a relationship with work stress. As stated by Glazer and Beehr (2005) it can be defined that role overload or workload is the third type of role stress that can be identified as the number of tasks that allocated to perform that exceeds the individual's ability, limited time and insufficient resources to fulfill the commitment. The previous studies that conducted by few researches shows that role overload to have a relationship with work stress.

**Hypotheses 1: There is a relationship between role overload and work stress.**

Based on a research carried out by Rizwan *et al.* (2014) supported that there is a relationship between role ambiguity work stress. The association between role ambiguity and work-related stress is supported by Usman *et al.* (2011) as he determined



the role ambiguity has a relationship to work stress. This explains that work stress are at greater level when the role ambiguity increased among employees. Moreover, a study carried out by Yousef (2002) also has identified that role ambiguity is one of the major stressor that increasing work stress among employees. The study conducted by Zhou Yongkang *et al.* (2014) determined that role ambiguity has a relationship on work stress. Based on the above literature review researchers come out with a hypotheses that there is a relationship between role ambiguity and work stress.

**Hypotheses 2: There is a relationship between role ambiguity and work stress.**

Numerous researches have hypotheses about the relationship of work stress and career development. A study conducted by Haque (2014), found that career development had a relationship on work stress. Supported by Coetzee & Villiers (2010) explained that job stress is related to individuals' career orientations. Based on a framework of work-related stress that proposed by Michie (2002), it is found that career development is a stressor that originate from lack of job security which has an influence on the employee's sense of wellbeing, commitment to work and lead to work related stress. The relationship is also similar to a study conducted by Adel Al-Alawi and Al-Alawi (2014) as the results shows that career development are categorized as low stressor which may occur when there is lack of career opportunities. Therefore, the findings of previous researches shows that there is a relationship between career development and work stress.

**Hypotheses 3: There is a relationship between career development and work stress.**

Apart from that, Atheya & Arora (2014) clarifies that work stress will decrease the presence of work life balance. The human solution report indicates that workers are facing chronic job stress as they experienced difficulties in balancing their work and personal life. High level of work stress is equivalent to work-life balance difficulties (Lowe, 2006). According to Bell, Rajendran and Theiler (2012) they discussed that there is a relationship between work stress and work-life balance. Bell, Rajendran and Theiler (2012) had developed hypotheses that the level of work life to personal life balance will be related to job stress. In summarization of research carried out it is found that there is an association between work-life balance and work stress. According to Greenhaus (2006), an undesirable work-life balance leading to work stress. Based on the previous researches it is concluded that there is a relationship between work-life balance and work stress.

**Hypotheses 4: There is a relationship between work-life balance and work stress.**

Work-related stress is caused by several stressors that determined by previous researchers that conducted studies on the area of work stress. The stressor are consist of role ambiguity (Yousef, 2002), the pressure of time (Salas & Klein, 2001), conflict (Alexandros-Stamatios *et. al.* 2003) and performance pressure (Cahn *et al.* 2000). Work stress among call center executives are also affected by stressors of work stress. Previous researched that conducted shows high and low effect of stressor or contributing factors on work stress. Based on a study carried out by Karimi *et al.* (2014) role overload, role conflict and role ambiguity are effecting work stress by 37 %. A research conducted by Sailaja *et al.* (2013) show that five factors has 71.3 % effect on work stress. The five contributing factors of work stress consist of work stressor, role stressor personal development stressor, interpersonal relationship and organizational

climate stressor. Based on the pass researches it is identified that some stressor are influencing work stress. In summarization, based on the researches conducted by few researchers' shows that there is a stressor effect on the work stress.

**Hypotheses 5: There is effect of role overload, role ambiguity, career development and work-life balance on the work stress.**

### **3.4 Research Design**

This research is conducted in quantitative method which intends to identify the relationship among stressor and occupational stress. This study emphasize on testing the hypothesis that consist of five hypotheses which will carefully analyze the data collected from questionnaires. This section will discuss the details about the aspects included in the methodology such as location of study, sampling and data collection. Research design can be classified into two types which consist of qualitative and quantitative research design.

Quantitative research design had been used for this study. According to Leedy and Ormrod (2001) quantitative research is expected to be precise in its measuring and investigation, as it proposed by the existing theories. Quantitative research upholds the hypotheses of an empiricist paradigm (Creswell, 2003). Quantitative research generally focuses on measuring social reality. According to Sukamolson (2007), he pointed that quantitative research questions are constructed to identify the quantities in approximately and to set up research numerically. Quantitative researchers are also viewing the world as reality that can be objectively determined so inflexible guides in the process of data collection and analysis are very important. The benefits of utilizing quantitative research design is to enable the precise analyze on the variables, minimize

the cost and time. Cross-sectional research method had been applied for this study. Cross-sectional research is an observational study that depicts the exposure and outcome that's are resolved in the meantime point for each study member. Allow examination of associations between multiple exposures and outcomes. According Maxwell & Cole (2007) cross-sectional design is mostly used in studies that investigate stress process. One of the disadvantages of this method is, any casual analysis of experimental relations amongst predictor and outcome variable is questionable. In comparison, longitudinal study offers the cause-effect results, however it proceeds with more time to obtain the outcomes. Longitudinal study is not suitable for this study.

### 3.5 Operational Definition

**Table 3.1**

*Definition of Key terms (Dependent and Independent Variables)*

TERMS	DEFINITIONS
<b>Work Stress</b>	According to Topper (2007), work stress is termed as the view of irregularity among environmental requirements and individual abilities to fulfill the requirement.
<b>Role Overload</b>	Role overload is termed as a condition whereby an employee having excess work to do in a certain time period (Conley & Woosley, 2000).
<b>Role Ambiguity</b>	Robbins <i>et al.</i> (2009) stated that role ambiguity is formed when the role expectations are unclear and employees are ambiguous on the task that he or she required to perform.
<b>Career Development</b>	Noe (2008), defined career development as a process which employees' improve from a level to another. Each career development stage is characterized by diverse sets of development tasks, activities, and relationships.
<b>Work Life Balance</b>	Work-life balance is the degree to which an individual can instantaneously adjust the emotional, behavioral and time demands of both paid work, family and personal obligations (Hill <i>et al.</i> 2001).

### **3.6 Unit of Analysis**

Call center executives of BPO call center in Selangor is the unit of analysis for this study. Business process outsourcing is the fast growing industry in Malaysia. Malaysia has become one of the prefer country for Business Process Outsourcing Industry. BPO companies had created many job openings and generated more than RM 5 billion revenue by the growing demand on BPO (David, 2013). Along with China, India and Philippines, Malaysia was also certainly was benefited from the growing demand of BPO industry.

According to Iwami (2016), stated that Malaysia's ranking as a main outsourcing destination has enhanced from 32<sup>nd</sup> in 2007 to 18<sup>th</sup> in 2014 and endlessly attaining high standards. According to Yu (2010), the inflation rate in Malaysia is 2.4%, lower than most Southeast Asian countries are also a reason for BPO Company's growth in Malaysia. Call center jobs has a high demands among youngsters as the job seem attractive due to easy to enter and exit, changing lifestyle and remuneration packages (Raja and Bhasin, 2014). Raja and Bhasin (2014) added that call center in BPO industry is a very stressful environment to work. The researcher has chosen call center executives at BPO in Selangor to study work stress with role overload, role ambiguity, career development and work-life balance. Work stress among may differ by how the appraise he situation and their capability to handle the situation. At the same time generation differences of the employees are also influencing the level of work stress. Total 152 respondents are involved in this study.

### 3.7 Research Instrument

The instrument used for this study is questionnaire form. Questionnaire enables the participants to certainly understand and answer the questions quickly in very short time. Closed-end Likert scale had been utilized for this study. Precisely, the five-point Likert scale have used in six different sections. Section A contains demographic profile namely gender, age, highest education current position, length of employment, type of employment and monthly income. Section B, C, D, E and F contains measures of work stress, role overload, role ambiguity, career development and work life balance job satisfaction, these questionnaires were distributed in English, which comprises of 52 questions and divided into 6 sections as stated in Table 3.2

**Table 3.2**  
*Questionnaires Section and Description.*

Questionnaires Section	Description
<b>Section A</b>	This section comprise of 7 items respondent's demographic profile such as gender, age group, highest education, current position, length of employment, type of employment and monthly income.
<b>Section B</b>	This section contains of 10 items measuring work stress.
<b>Section C</b>	This section comprise of 10 items measuring role overload.
<b>Section D</b>	This section comprise of 10 items measuring role ambiguity.
<b>Section E</b>	This section comprise of 10 items measuring career development.
<b>Section F</b>	This section comprise of 10 items measuring work life balance.

### 3.7.1 Validity Test

Validity test is conducted to examine whether the instrument is valid to measure what supposed to measure. Validity test consist of construct validity, criterion validity and content validity. The research instrument that utilized for this study are adopted. All the instruments were adopted from five valid instrument that used in previous researchers. The instrument for independent variables were adopted from Harris and Bladen (1994) for role overload, Rizzo, House & Lirtman (1970) for role ambiguity, Haque (2014) for career development and Lokke and Madsen (2014) for work-life balance. Additionally, the instrument for dependent variable of work stress are adopted from Tepper (2011). Ultimately, factor analysis ware conducted in this study to further validity test. The below discussion will focus on the normality rest and factor analysis outcomes.

### 3.7.2 Dependent Variable

This section disclosures the instrument for dependent variable of this study.

#### 3.7.2.1 Work Stress.

The measurement for work stress is developed by Tepper (2011). The measurement of this dependent variable comprise of 10 item scale of work stress. The five-point Likert scale (1= strongly disagree to 5= strongly agree) had been used in this measurement. The items for the work stress variable are listed in Table 3.3.

**Table 3.3**

*Items of work stress questionnaires*

Variables	Items
Work Stress	1) I have unachievable deadlines. 2) I have to neglect some tasks because I have too much to do. 3) I am unable to take sufficient breaks 4) I have to work very fast.

*Items of work stress questionnaires (Continued)*

Variables	Items
<b>Work Stress</b>	5) I have a choice in deciding how I do my work 6) Staff are consulted about change at work 7) I feel that job pressures interfere with my family or personal life. 8) At times I fell overloaded with the amount of work required to do. 9) I feel that job pressures interfere with my family or personal life. 10) I have adequate control or input over my work duties.

### 3.7.3 Independent Variable

This sections describe the instrument of the independent variable (stressor) of this study such as role overload, role ambiguity, career development and work life balance.

#### 3.7.3.1 Role overload.

The following measurement is consists of 10 items to measure call center executive's role overload in business process outsourcing industry. The instrument are develop by Seashore *et al.* (1982) and the instrument for role overload are adapted from a study conducted by Harris and Bladen (1994) the items included such as 'My work contains elements that are too demanding'. This measurement are utilizing five-point Likert scale 1 = strongly disagree to 5 = strongly agree). The Cronbach's alpha coefficient of role overload item is 0.77.

**Table 3.4**

*Items of role overload questionnaires*

Variables	Items
<b>Role Overload</b>	1) I never seem to have enough time to get everything done. 2) I have too little time to perform my daily tasks. 3) Times that I must work under time pressure. 4) Worry that I will not be able to fulfill my tasks. 5) It often seems like I have too much work for one person to do.



*Items of role overload questionnaires (Continued)*

Variables	Items
<b>Role Overload</b>	6) It seems to me that I have more work at my job than I can handle 7) I often have too much to do in my job. 8) I have too much work to do everything well. 9) My work contains elements that are too demanding. 10) The amount of work I am asked to do is fair.

### 3.7.3.2 Role Ambiguity.

Measurement used for role ambiguity among call center executives are developed by Rizzo, House & Lirtman (1970) and the items adapted from a study conducted by Glissmeyer *et al.* (2008). This measurement contains 10 items to measure role ambiguity in BPO Call Canter. The five-point Likert scale (1= strongly disagree to 5= strongly agree) is used in this questionnaires. The Cronbach's alpha coefficient of role overload item is 0.8184. The items for the role ambiguity variable are listed in Table 3.5


**Table 3.5:**  
*Items of role ambiguity questionnaires*

Variables	Items
<b>Role Ambiguity</b>	1) My duties and work objectives are not clear to me. 2) I feel certain about how much authority I have. 3) Clear, planned goals and objectives for my job. 4) I know that I have divided my time properly. 5) I know what my responsibilities are. 6) I know exactly what is expected of me. 7) Explanation is clear of what has to be done. 8) My authority matches the responsibilities assigned to me. 9) Sometimes I am not sure how to complete all the tasks I have been assigned. 10) Ambiguity of instructions at work.

### 3.7.3.3 Career Development

The measurement for this section is consists of 10 items to measure call center executive's career development opportunities in business process outsourcing call center. The instrument is developed by Haque (2014). The measurement are carried out using five-point Likert scale (1 = strongly disagree to 5 = strongly agree). Moreover, the Cronbach's alpha coefficient of the adapted item is 0.89. The element for career development is listed below in table 3.6:

**Table 3.6:**  
*Items of career development questionnaires*

Variables	Items
 <b>Career Development</b>	<ol style="list-style-type: none"><li>1) My workplace provide me with opportunity to fully develop my skills and abilities.</li><li>2) I receive appropriate recognition or rewards for good performance.</li><li>3) I have been trained to develop my career</li><li>4) I have been given a personal development plan</li><li>5) I have been given work which has developed my skills for the future.</li><li>6) My departmental officer has made sure I get the training I need for my future.</li><li>7) I see a future for myself in a higher level role in this Organization</li><li>8) My direct supervisor takes interest in my career development</li><li>9) I have good access to development opportunities in my current job.</li><li>10) My organization has a formal mentoring Program for jobs like mine.</li></ol>

### 3.7.3.4 Work Life Balance

Measurement used for work life balance was adapted from a study conducted by Lokke and Madsen (2014). This measurement contains 5 items to measure work life balance in BPO Call Canter. The five-point Likert scale (1= strongly disagree to 5= strongly

agree) is used in this questionnaires. The items for the work life balance variable are listed in Table 3.7.

**Table 3.7:**  
*Items of work life balance questionnaires*

Variables	Items
<b>Work-life Balance</b>	1) I often work during the weekend 2) I do not take all my holidays 3) Inflexible working hours 4) I would accept a promotion with higher pay even if it means working longer hours. 5) The number of weeks of vacation time impacts my decision to accept a job offer. 6) I would enjoy working from home. 7) Time off is more important to me than overtime. 8) How easy or difficult is it for you to balance 9) My work life, family life and leisure time are not separated entities 10) I think about my job when I'm not working

### 3.8 Population and Sampling.

- i. Call center executives that working in Business Process Outsourcing (BPO) Industry at Selangor, Malaysia is the target population for this study. According to Eden (2010), Malaysia is the home to many international business process outsourcing companies. As compared to the domestic players, there are about 18 US companies that have set up outsourcing operations spread across more than two centres and over 1000 employees in Malaysia; this scenario has been highlighted in ValueNotes (2009). Across Malaysia, there is 30 BPO Call centers. Total 5 BPO call centers are located in Selangor. Only two BPO call centers responded to participate in this study. The sample population are from (2) two BPO Call center which located in Selangor which are; Symphony BPO Solutions Sdn Bhd and Aegis BPO Solutions Sdn Bhd. The primary reason for choosing this industry is because, it has been recognized that most of the call center executives

who work in BPO companies are facing high level of work stress in comparison to normal call centers. Therefore, aiming this group of population would be most suitable to identify the contributing factors of job stress in BPO Call Centers.

There is 150 call center executives are working Symphony BPO Solutions Sdn Bhd that located in Petaling Jaya, Selangor. Total 100 call center executives is working in Aegis BPO Solutions Sdn Bhd that located in Petaling Jaya. Based on the sampling frame, there are total 250 call center executives working in the participating BPO call centers, Selangor. The sample size decided based on a set population size table of Krejcie and Morgan (1970). Therefore the applicable sample size for given population of 250 is precisely 152(n). The survey form was published in Google survey and also directly distributed the questionnaires to Call center executives from (2) two different BPO Call Centers in Selangor.

Researchers collect information by a wide variety of methods and this method can be categorized into two which consist of probability and non-probability (Doherty, 1994). Consequently, non-probability is utilized for this study as it's a purposive sampling method. Hence, purposive sampling is the type method that is very much judgmental, selective, or subjective sampling which emphasis on precise characteristic among the population who willing to contribute to this research.

### **3.9 Pretest**

The pretest for this study had been carried out 10 March 2016. Supervisor had counter checked all questionnaires that adapted by the researchers. Respondents are encouraged to provide feedback on the adapted questionnaires. Researcher ensure that there are no

unclear questions are included in the surveys. The researcher had conducted pilot testing to identify the consistency of each variable. Therefore, pilot testing would enable the researcher to identify whether the items included in the questionnaire are reliable and valid.

### **3.10 Data Collection Procedures.**

The primary data collection tool that utilized in this study is questionnaires to gather data from respondents. Questionnaires is the fastest and cost effective data collection tool which is suitable for large group respondents. The anonymity data composed among respondents will be well-kept and can lead to further consistent response Schermerhorn *et al.* (2000). Researcher had distributed 30 questionnaires to Business Process Outsourcing Call Centers that has similar characteristic of the selected companies for pilot testing.

Researcher had contacted the HR personnel with cover letter and sample of questionnaires to obtain permission in order to participate this study. In regards with this (2) two BPO Call Centers in Selangor agreed to participate in this study. The researcher had distributed 90 questionnaires to Symphony BPO Solutions Sdn Bhd and 90 questionnaires to Aegis BPO Solutions Sdn Bhd, on 20 March 2016. The respondents are given (7) seven consecutive days to complete the questionnaires. After (7) seven days, the researcher had collected (80) eighty questionnaires out of (90) ninety from Symphony BPO Solutions Sdn Bhd. Meanwhile, researcher had collected in return (72) seventy two questionnaires from Aegis BPO Solutions Sdn Bhd.

### **3.11 Techniques of Data Analysis.**

The data that gathered from respondents analyzed by Statistical Package for Social Science (SPSS) version 17.0 software. All the items were coded in advance to key in the computer. Outcomes are described specifically by expressive analysis such as frequency, percentage and mean, and inferential statistics (Cronbach's Alpha, Pearson Correlation and Multi-Regression). Researcher use descriptive analysis to examine demographic characteristics such as; gender, age group, highest education qualification, current position, length of employment, employment status and monthly income. Cronbach's alpha is one of the most frequently used reliability coefficients (Hogan, Benjamin & Brezinski, 2000). Pearson correlation analysis was utilized in this research to investigate the extent of relationship among dependent variable and independent variable of this study. Multiple Regression Analysis had used in this study to assess the hypotheses developed for the study.

### **3.12 Summary**

The chapter covered the method of analysis that used in this research which comprise of introduction, research framework, hypotheses development, research design, measurement for the dependent variable and independent variables, population and sampling, pretest, data collection procedures, and the techniques of data analysis. The following chapter described the outcomes of this research.

## **CHAPTER 4**

### **FINDINGS**

#### **4.1 Introduction.**

The following chapter described the outcomes of the review utilizing descriptive statistic and inferential statistics consist of frequency percentage, correlation and regression. This study had covered the descriptive statistics which consist of analysis describing the respondent's demographic aspects such as gender, age, current position, length of employment, type of employment and monthly salary. The study emphasized on correlation analysis to investigate the association between independent variables such as role overload, role ambiguity, career development and work-life balance with dependent variable of work stress. Lastly, multiple regression investigation was applied to identify the consequence of contributing factors on work stress.

#### **4.2 Reliability Analysis.**

Cronbach's Alpha is identified as coefficient of reliability. According to Sekeran and Bougie (2010) stated that reliability coefficient will specify how well the component in the set are positively correlated with each other. Reliability that is closer to 1 is better and reliability value that achieved value more than 0.80 are measured as well. Consequently, 0.70 is measured satisfactory, reliability value less than 0.60 characterizes as very low (Sekaran, 2003). In the following research, a dependability analysis was conducted for each independents variables and dependents variable for pilot testing and actual data collection which is after remove some components as presented in the table 4.1.

**Table 4.1:***Summary of reliability analysis (Independent and dependent variables)*

<b>Variables</b>	<b>Cronbach Alpha By actual researcher</b>	<b>Pilot Test Cronbach Alpha</b>	<b>Actual Cronbach Alpha</b>
<b>Dependent Variable</b>			
Work Stress	-	0.761	0.730
<b>Independent Variable</b>			
Role Overload	0.77	0.902	0.870
Role Ambiguity	0.8184	0.752	0.591
Career Development	0.89	0.960	0.894
Work-life Balance	-	0.708	0.584

Table 4.1 demonstrates the findings for reliability analysis of Cronbach's Alpha of the variables. The result of pilot test shows that career development has the highest Cronbach's Alpha value of 0.960 followed by role overload which the Cronbach's Alpha value of 0.902, role ambiguity consist of 0.752 and work-life balance shows a reliability value of 0.708. In the meantime, the dependent variable; work stress specifies Cronbach's Alpha value of 0.761. Based on the analysis of Cronbach's Alpha for actual data also show that career development has the highest Cronbach's Alpha value of 0.894 and followed by role overload which stated a value of 0.870. Role ambiguity show Cronbach's Alpha value of 0.591 and work-life balance indicates value of 0.584. The Cronbach's Alpha value for pilot testing indicates above than 0.70. (Refer Table 4.1), which measured as consistent and appropriate for advance analysis. However, the Cronbach's Alpha value for actual data analysis of role ambiguity and work-life balance is below than 0.70 and more than 0.50. George and Mallery (2003) clearly stated that Cronbach's Alpha value more than 0.50 is poor and value less than 0.50 is considered unacceptable. Therefore, the Cronbach's Alpha of value role ambiguity and work-life balance shows a poor value.



### 4.3 Testing the Research Data

#### 4.3.1 Normality Test

Normality test is basically used to examine questionnaires are normally distributed. Factor analysis will strength the assumptions of normality. The result of normality test that shows normally distributed indicate that the variables are normally distributed. Normality test will be conducted using the sample data of pilot testing. The result of normality test are consists of skewness and kurtosis. Normality test allows the researcher to determine the skewness and kurtosis value for all variables. In order to determine the skewness and kurtosis a rule is applied whereby, the Z value is divided either score by its standard error and if the result is greater than  $\pm 1.96$  statistic value it is proposed that the facts are not normally distributed.

**Table 4.2**  
*Result of Skewness and Kurtosis for every variable*

Variable	Range		Conclusion
	Skewness	Kurtosis	
<b>Stressor (IV)</b>			
<b>Role Overload</b>	0.276	0.302	Normal distribution
<b>Role Ambiguity</b>	0.039	1.511	Normal distribution
<b>Career Development</b>	-0.202	-1.18	Normal distribution
<b>Work-life Balance</b>	-1.900	1.143	Normal distribution
<b>Work Stress (DV)</b>	0.928	-0.791	Normal distribution

Based on the Table 4.2, the result of skewness and kurtosis shows that all independent variables and the dependent variable are normally distributed as the skewness and kurtosis values are within the range of  $\pm 1.96$ . On the other hand, there are few other methods to identify the value. The methods such as box plot and leaf plot.

#### 4.4 Factor Analysis.

Factor analysis is known as explorative analysis. The factor analysis are conducted to reduce or remove the information by reducing the dimension in the model. Factor analysis's underlying point is a correlation matrix, where the inter-correlations among the considered factors are displayed. The dimensions of this matrix can be reduced by "looking for variables that correlate extremely with a group of other variables, but correlate very badly with variables outside of that group" (Field, 2000: 424). This analysis reduces the dimension of the variables to reduce the complexity of data set. Factor analysis for the present study are conducted even the respondents are 152 to confirm the validity of the data set. The outcomes of factor analysis will be discussed below separately based on each variable.

##### 4.4. 1 Factor Analysis for Dependent Variable.

**Table 4.3:**  
*KMO and Bartlett's test for Dependent Variable (Work Stress)*

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.605
Bartlett's Test of Sphericity	Approx. Chi-Square	153.883
	df	45
	Sig.	.000

The dependent variable for this research are known as work stress. This dependent variable is influenced by the four independent variables of stressors. The dependent variable identified Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy value

of for this variable is 0.605. In explaining the total variance, it is not required to remove any components because they have eigenvalues greater than 1.

#### 4.4.2 Factor Analysis for Independent Variables.

Independent variables for this study are recognized as the stressors. Stressors are also known as contributing factor of work stress. Independent variable of role overload specified Kaiser-Meyer-Okin (KMO) Measure of Sampling Acceptability value is 0.856 which is above the suggested value of 0.6 (Kaiser, 1970) and the Bartlett's Test of Sphericity stated statistical significance of 0.000. In order to investigate the anti-image correlation matrix, it exposes the existence of coefficients of 0.5 and above.

**Table 4.4**  
*KMO and Bartlett's test for Role Overload*

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.856
Bartlett's Test of Sphericity	Approx. Chi-Square	220.798
	df	45
	Sig.	.000

In examining the total variance explained, all the components was remained because they have the eigenvalues greater than 1. Varimax rotation has been utilized to determine the distribution of component according to the factors. The researcher did not exclude any of the component for role overload as Kaiser-Meyer-olkin (KMO) Measure of Sampling as the adequacy value indicates a good level of validity.

**Table 4.5:**  
*KMO and Bartlett's test for Role Ambiguity*

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.738
Bartlett's Test of Sphericity	Approx. Chi-Square	212.841
	df	45
	Sig.	.000

Secondly, the independent variable is role ambiguity and the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy value is 0.738. The total variance describe that no items should be remove because they have eigenvalue greater than 1. The distribution of items according to factors, it is achieved by using varimax rotation.

**Table 4.6**  
*KMO and Bartlett's test for Career Development*

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.805
Bartlett's Test of Sphericity	Approx. Chi-Square	281.936
	df	45
	Sig.	.000

Thirdly, the independent variable for this study is career development. This variable states the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy rate of 0.805. In clarifying the total variance, it is not required to remove any of the components as it has eigenvalues greater than 1.

**Table 4.7**  
*KMO and Bartlett's test for Work-life Balance*

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.686
Bartlett's Test of Sphericity	Approx. Chi-Square	111.979
	df	45
	Sig.	.000

Lastly, the independent variable is work-life balance and the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Acceptability value is 0.686 which above 0.60 of the average rate for KMO. In analyzing the total variance, few components should be eliminated because they have eigenvalues value of greater than 1. The factors would clarify that 71 % of the variance. In determining the circulation of items according to factors, it is achieved by using varimax rotation.

#### **4.5 Descriptive Analysis.**

##### **4.5.1 Response rate.**

A total of 180 questionnaires was distributed to the executives that working in two BPO Call Centers in Selangor, Malaysia. Out of 180 questionnaires distributed to executives, 157 were returned, which is 87.22 % response rate. In overall 157 questionnaires and 5 (3.18 %) were incomplete. Only 152 questionnaires which is 84.44 % were used for further analysis. A response rate that commonly considered as acceptable if is more than 50 %, nevertheless it is more appropriate if the response rate is 80% and above. (Hair *et al.* 2006). Consequently, 84.44 % response rate is anticipated and appropriate to be used in this study.

#### 4.5.2 Respondents' Demographic Characteristic.

Table 4.8 shows the respondent's demographic characteristic. Frequency analysis shows that, 91 (59.9 %) respondents were male and 61 (40.1 %) out of 152 respondents are female. The finding shows that majority of the respondents are were between the ages of 19-29 years old (70.4%). Frequency analysis on the highest qualification shows that majority 79 (52.0 %) of the call center executives are Bachelor Degree holders. In terms of current position, the analysis shows that majority of the respondents are from executive level which consist of 89 (58.6%). Furthermore, the analysis on length employment found that majority of 69 (45.4%) respondents had below than 2 years of service in BPO Call Center. Besides, the analysis on type of employment shows that 126 (82.9%) respondents are on permanent employment. Lastly, it is revealed by the analysis that most of the BPO Call Center Executives are getting monthly income in the range of 2001 to 3000 which consist of 57 (37.5%) respondents.

#### 4.5.3 Mean and Standard Deviations.

**Table 4.8**

*Profile of Respondents*

Demographic	Characteristics	Frequency	Percentage (%)
<b>Gender</b>	Male	60	39.5
	Female	92	60.5
<b>Age</b>	24-34	83	54.6
	35-45	36	23.7
	46-56	18	11.8
	> 56	15	9.9
<b>Highest Education Qualification</b>	Master	19	12.5
	Bachelor Degree	79	52.0
	Certificate / Diploma	37	24.3
	Bachelor Degree	21	13.8
	SPM / STPM	17	11.2

*Profile of Respondents (Continued)*

Demographic	Characteristics	Frequency	Percentage (%)
<b>Current Position</b>	Senior Manager	8	5.3
	Manager	10	6.6
	Assistant Manager	2	1.3
	Senior Executive	21	13.8
	Executive	43	28.3
<b>Length of Employment</b>	Below than 2 years	59	38.8
	2 years to 5 years	44	28.9
	5 years to 10 years	39	25.7
	More than 10 years	10	6.6
<b>Type of Employment</b>	Permanent	126	82.9
	Contract	25	16.4
	Outsource (Agency)	1	.7
<b>Monthly Income (RM)</b>	< 2000	42	27.6
	2001 – 3000	52	37.5
	3001 – 4000	29	19.1
	4001 – 5000	5	3.3
	> 5001	19	12.5

**Table 4.9**

*Descriptive Statistics of the Dependent and Independent Variables.*

Variable	Mean	Standard Deviation
Work Stress	3.40855	6.16865
Role Overload	3.65789	7.98054
Role Ambiguity	3.42039	4.99449
Career Development	3.26645	9.13834
Work-life Balance	3.20922	4.45632

The independent and dependent variables are assessed based on a 5-point scale. Table 4.9 displays the highest mean value for role overload is (M=3.65789) and followed by role ambiguity (M=3.42039). Career development stated value of (M=3.26645) and the

lowest mean is work-life balance (M=3.20922). Apart from that, work stress shows value of (M= 3.40855). The dispersion of interval and ratio scale are measured by using standard deviation which offers an index of the range of distribution of the variability. Therefore, table 4.9 above exhibits the greater standard deviation for career development (SD =9.13834) and followed by role overload (SD=7.98054). Vice versa, role ambiguity and work-life shows the lowest standard deviation value which consist of (SD =4.99449) and (SD =4.45632). The dependent variable, work stress indicates the standard deviation value of (SD=6.16865).

#### 4.6 Correlation Analysis

The following section will describe the outcome of Pearson Correlation Statistical analysis to recognize the relationship between independent variables (Stressors) and dependent variables (Work Stress). According to BOLBOACA (2006), correlation coefficient analysis is a modest statistical degree of association among one dependent and one or more than one independent variables.

**Table 4.10**  
*Correlation Analysis results*

Variables		WS	RO	RA	CD	WB
<b>Work Stress (WS)</b>	Pearson Correlation	1	.794**	.251**	-.166*	-.183*
	Sig. (2-tailed)		.000	.002	.040	.024
	N	152	152	152	152	152
<b>Role Overload (RO)</b>	Pearson Correlation	.794**	1	.197*	-.291**	-.250**
	Sig. (2-tailed)	.000		.015	.000	.002
	N	152	152	152	152	152
<b>Role Ambiguity (RA)</b>	Pearson Correlation	.251**	.197*	1	.350**	.365**
	Sig. (2-tailed)	.002	.015		.000	.000
	N	152	152	152	152	152



*Correlation Analysis results (Continued)*

Variables		WS	RO	RA	CD	WB
<b>Career Development (CD)</b>	Pearson Correlation	-.166*	-.291**	.350**	1	.877**
	Sig. (2-tailed)	.040	.000	.000		.000
	N	152	152	152	152	152
<b>Work-life Balance (WB)</b>	Pearson Correlation	-.183*	.250**	.365**	.877**	1
	Sig. (2-tailed)	.024	.002	.000	.000	
	N	152	152	152	152	152

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

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

Table 4.10 above exhibits the correlation outcome among work stress, role overload, role ambiguity, career development, and work-life balance. The result attained found significant and positive relationship among role overload and work stress ( $r = .794^{**}$ ,  $n = 152$ ,  $p \leq 0.01$ ). These correlation result shows that greater role overload among call center executives will lead to higher work stress. The results shows significant and positive relationship between role ambiguity and work stress ( $r = .251^{**}$ ,  $n=152$ ,  $p \leq 0.01$ ).The outcome for this relationship found that work stress will increase among the call center executives if role ambiguity is greater. On the other hand, career development has a weak and significant negative correlation with work stress ( $r = -.166^{*}$ ,  $n = 152$ ,  $p \leq 0.05$ ). The relationship exposed that greater level of career development opportunities among call center executives will reduce the level of work stress in BPO Call Center. The study findings identified that work-life balance has low and significant negative relationship with work stress ( $r = -.183^{*}$ ,  $n=152$ ,  $p \leq 0.05$ ). Therefore, high level of work-life balance will lower the work stress among the executives in the BPO Call Center.

#### 4.7 Multiple Regression Analysis of the Stressor on Work Stress.

The developed hypotheses for this study are tested by conducting Multiple Regression Analysis. Multiple Regressions analysis are used to evaluate the value of contributing stress variables on work stress. Multiple regression also enable the researcher to identify the relationship among the dependent and independent variables. Multiple Regressions is an extension of bivariate correlation. R square provides a measure of how well the data points are simulated by model.

**Table 4.11**  
*Multiple Linear Regression (Model Summary)*

Model Summary <sup>a</sup>				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.807 <sup>a</sup>	.651	.641	3.69462

a. Predictors: (Constant), WB, roleoverload, roleambiguity, careerdevelopment

b. Dependent Variable: workstress

Table 4.11 indicates that the coefficient of determination value ( $R^2$ ) is equal to 0.651. Therefore, the R Square value of 65% means variations of work stress can be explained by the four independent variables (role overload, role ambiguity, and career development and work-life balance). However, it identified that 35% variation of the work stress remained unexplained under this model and can be explained by other variables. Based on table 4.11, the R-square present that 65.1% of the variation in work stress is identified contributing factors of work stress such as role overload, role ambiguity, career development and work-life balance. Moreover the F value of the study demonstrate how well the model fit in overall, which is  $F = 68.484$ .

**Table 4.12**  
Multiple Linear Regression Analysis (ANOVA).

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3739.303	4	934.826	68.484	.000 <sup>a</sup>
	Residual	2006.585	147	13.650		
	Total	5745.888	151			

a. Predictors: (Constant), WB, roleoverload, roleambiguity, careerdevelopment

b. Dependent Variable: workstress

In order to determine the two populations of variances are identical, F-test is utilized. The F-test are carried out is to identify the model which best fit the population from where the data were tried and gathered. Referring to Table 4.12, the F-value is 68.484 with a p-value of 0.000. Therefore, the p-value of ANOVA is less than the significance level 0.05 and it indicates that the four independent variables have a significant relationship with work stress.

**Table 4.13**  
Multiple Regression Results (Coefficient)

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig
	B	Std.Error	B		
<b>Constant</b>	7.729	2.454		3.150	.002
<b>Role Overload</b>	.606	.042	.784	14.501	.000
<b>Role Ambiguity</b>	-.122	.069	.099	1.780	.077
<b>Career Development</b>	.141	.070	.209	2.019	.045
<b>Work-life Balance</b>	-.287	.142	-.207	-2.025	.045

Dependent variable: Work Stress.

R Square = .651

F = 68.484

\*p≤0.05

Based on Table 4.13 the beta value of role overload is .784,  $p \leq 0.00$  and career development is .209,  $p \leq 0.45$ . This shows role overload and career development has strong significant relationship on work stress. Work-life balance and work stress relationship shows the beta value of -.207,  $p \leq 0.45$ . Work-life balance indicate that there is a significant relationship with work stress. Role ambiguity has shown a low significant relationship with work stress by demonstrating the beta value of .099,  $p \leq 0.77$ . It is summarized that, role overload, role ambiguity, career development and work-life balance is appropriate variables to analyze work stress among call center executives in BPO.

#### 4.8 Summary of hypotheses testing and result.

**Table 4.14**  
*Summary of the Hypotheses Testing and Result*

Hypothesis	Description	Result
H1	There is a significant relationship between role overload and work stress.	Accepted
H2	There is a significant relationship between role ambiguity and work stress.	Accepted
H3	There is a significant relationship between career development and work stress.	Accepted
H4	There is a significant relationship between work-life balance and work stress.	Accepted
H5	There is a stressor effect on the work stress.	Accepted

As overall, the result shows that role overload has a strong positive relationship with work stress. Therefore extreme role overload contribute to high level of work stress among executives in BPO call centers. Role ambiguity has a low positive relationship with work stress. Ambiguousness about the job or role has impact on work stress. Besides that, work life balance and career development has negative relationship with work stress. It is proven that high level of work-life balance and good career development opportunities among executives will reduce the level of work stress in BPO call center. All five hypotheses are accepted for this study. Role overload had been identified as the highly contributing factor of work stress among call center executives that working in Business Process Outsourcing in Selangor. As overall, the outcome of multiple regression analysis shows the R<sup>2</sup> value of this is .651 which indicated that contributing factors have significant effect on work stress among call center executives in BPO, Selangor.

#### **4.9 Summary**

This chapter has answered the hypotheses. Further, elaboration and discussion on the outcomes is discussed on the following chapter. The final chapter are comprise of implications, limitations and the future recommendations that appropriate for this study.

## **CHAPTER 5**

### **LIMITATIONS, RECOMMENDATIONS, AND CONCLUSION**

#### **5.1 Introduction**

The following section will summarize the discussion and focus on the research objectives that developed for the study. Furthermore, the limitations of this study and recommendation for future study are also will be discussed in the section. Lastly, the conclusion will conclude the overall discussion.

#### **5.2 Discussion**

The aim of these research is to examine the relationship between independent variables such as role overload, role ambiguity, career development and work-life balance on the dependent variable which known as work stress in BPO call center. This section will determine the most significant factors that contribute work stress. This research had utilized cross-sectional research design. This study was conducted with total 152 of respondents in BPO Call Center. Prior conducting the actual data collection, pretest was carried out with 30 respondents. The data collection was carried out on role overload, role ambiguity, career development, work-life balance and work stress. Five-point Likert Scale is the instrument that was utilized as a part of this examination to evaluate the variables.

Demographic information consist of respondent's sex, age, education, current position, length of service and monthly salary. This chapter will analyze the variables using descriptive analysis, reliability analysis, and inferential analysis such as Pearson Correlation and Multiple Regression. After completion of the analysis, the result will

enable the organization to identify the contributing factors of stress. The findings will facilitate the organization to manage the work stress effectively. Further discussion on this part will cover the research objectives that supported by the previous researches.

### **5.2.1 Objective 1: To analyze the relationship among role overload and work stress among call center executives in BPO Call Center, Selangor.**

The first research objective shows a significant and positive relationship between role overload and work stress based on the correlation analysis results. Based on Table 4.5, the relationship of role overload and work stress is ( $r = .794^{**}$ ,  $n = 152$ ,  $p \leq 0.00$ ). Role overload are significantly related to work stress in BPO call center. It is important to focus on role overload in the workplace in order to handle the work stress among call center executives. Considering the demographic background of the respondents, female employees are the biggest portion of the respondent for this study. Female employees that encountered role overload are ending up with work stress due to family responsibility, night shift, flexibility constraints, managing conflict between work and life. Employee are facing difficulties to adapt the excessive role or demand that expected from them.

The findings shows that majority of the respondents are the executives that working in the call center with below than two years of service or experience. Most of executives with less than two years' experience are degree holder that is at the entry level. Role overload can create a situation whereby the fresh employees are unable to fulfill the extreme demand and it may make them feel stress. The respondents are mainly from the age group of 24 to 34 which may also considered as the entry level executives. The

age group also have impact on the adaptability of the respondents on the heavy role or responsibilities that assigned to the employees.

The employees who unable to cope with the work demand or conflicting work are facing work stress. The findings of this research is parallel to the study conducted by Karimi *et al.* (2014), Yongkang *et al.* (2014), Yaacob & Long (2015) illustrate that role overload contributing work stress. In the comparable studies it is found that role overload commonly will create a situation whereby the individual unable to fulfill the demand that expected of them to complete. Hereafter, it lead to work stress when the coping level is very poor and unable to accomplish the demand. The significant and positive relationship shows that increased role overload will effect higher work stress. Call center executives are facing role overload as they are assigned on long working hours and shift rotation. The call center work nature which requires the employees the to perform dual processing and the excessive demand that unable to be completed during working hours will lead them to feel the stress in the workplace. The relationship between role overload and work stress demonstrate that unattainable demands will create a pressure among the call center employees which may lead to work stress.

### **5.2.2 Objective 2: To analyze the relationship among role ambiguity and work stress among call center executives in BPO Call Center, Selangor.**

Research objective two is aim to analyze the relationship among role ambiguity and work stress. Correlation analysis was conducted to identify the relationship and the result presented in Table 4.5, shows a positive relationship between role ambiguity and work stress ( $r = .251^{**}$ ,  $n = 152$ ,  $p \leq 0.00$ ). Positive relationship among role ambiguity and work stress demonstrate that increased role ambiguity among call center executives



will lead to higher level of work stress among the employees. Role ambiguity is a situation where the employees are unclear of their role in the job or organization. BPO call center executives are facing role ambiguity due to lack of information on the job as they are handling customers from various client which requires them to keep updated with the information. The findings of this study is similar to the study conducted by Karimi (2014) and Vanishree (2014). The study findings and the cited studies discussed that role ambiguity has a positive effect on work stress.

A situation where the supervisors fail to clarify the role of the employees will lead to uncertainty among employees and directly make them feel pressure and it enhance work stress. Majority of the respondent that facing work stress are consist of executives who also can be categorized as entry level executives. Most of the executives are commonly facing role ambiguity when they are lacking from keep abreast with all the information related to work. Especially business process outsourcing call centers are dealing with dual processing work that requires to understand various client's products and services. Based on the previous researchers the increased level of role ambiguity will create pressure among employees. However, in this study role ambiguity identified has no significant effect on work stress. The findings shows that high level of role ambiguity among call center executives will contribute to work stress.

### **5.2.3 Objective 3: To analyze the relationship between career development and work stress among BPO Call Center executives, Selangor.**

This research objective are intend to analyze the association between career development and work stress. Based on Table 4.5, it is found there is a negative relationship with very low significant level among career development and work stress

( $r = -.166^*$ ,  $n = 152$ ,  $p \leq 0.05$ ). The finding illustrate that career development and work stress are inversely associated. High career development opportunities and advancement will reduce the work stress level among the BPO call center executives. BPO call center is an organization that providing service to client's customers and its operating for 24 hours and 7 seven days in a week. The customers are diversified from various organizations.

BPO call centers are more focusing on the smooth operation rather than strategic plans such as creating career path. Employee are more encouraged to focus on the day to day operation rather than providing career development opportunities such as promotion, training, learning opportunities and job security. Consequently, whenever executives are not given opportunities to hold challenging responsibilities or advancement, they tend to feel insecure and poor career growth. Poor career development opportunities will lead to work stress among BPO call center executives. The findings itself shows that majority of the BPO call center executives are consist of degree holder, though the average earning range is below RM 2000 to RM 3000. Commonly, salary has impact on the stress level among call center executives when the fell that their salary are not equivalent with the work their performing. The findings are supported with similar study that conducted by Haque (2014), Michie (2002) and Al-Alawi *et al.* (2014) which recognized a low significant and negative relationship among career development and work stress. The findings demonstrate that poor career development lead to high work stress among the BPO call center executives.

#### **5.2.4 Objective 4: To analyze the relationship between work-life balance and work stress among Call Center executives BPO Call Center, Selangor.**

This research objective are analyzing the association between work-life balance and work stress in BPO call center. Based on Table 4.5, indicates that work-life balance has a low significant and negative relationship with work stress ( $r = -.183^*$ ,  $n=152$ ,  $p \leq 0.05$ ). The results shows that there is an inversely relationship among work-life balance and work stress, whereby poor work-life balance or work-life conflict are directly increasing the work stress level among the call center executives.

Precisely it shows that employees who able to balance the work and life are satisfied with the work and organization and they tend to show organizational citizenship behavior in the workplace. Call center executives will not face the pressure to balance the work and life and the stress level will be lower in the workplace. Call center is an organization that provide customer services to their clients. Call center are required to have work-life balance in order to serve the customer with quality services. The findings are supported with comparable study that conducted by Bell, Rajendran & Theiler (2012) indicating that there is a low significant and negative relationship between work-life balance and work stress.

Call center executives who achieve work-life balance will tend to be more engaged, committed, loyal and satisfied with the organization. Work-life balance also can be associated with Gen Y. Generation Y are more prioritize flexibility and work-life balance in their career. Therefore, lack of work-life balance among Gen Y employees will create higher level of work stress compared to Gen X or Baby boomers. High level

of work-life balance among the employees will reduce the stress level which also can be more productive to both individual and organization.

**5.2.5 Objective 5: To analyze the effects of role overload, role ambiguity, work-life balance and career development on work stress among call center executives in BPO, Selangor.**

Multiple Regression analysis had be utilized by the researcher to predict the value of independent variables to determine the highly significant factor contributing work stress among executives in BPO Call Center, Selangor. Referring to Table 4.5, it is found that multiple regression value for the accumulated stressor is  $R^2$  (.651) and the adjusted  $R^2$  (.641). The  $R^2$  value of .651 indicates role overload, role ambiguity, career development and work-life balance (independent variables) had effected by 65.1 % contributing work stress among executives in BPO Call Center, Selangor. The F value 68.484 of this study is significant at less than 0.00 alpha levels. Consequently, it determines that's contributing variables (role overload, role ambiguity, career development and work-life balance) have significant effect on the dependent variable (work stress).

The research finding shows that role overload is the highest factor that specify greater influencing beta value of ( $\beta$  .784,  $p \leq 0.00$ ). Therefore, it is summarized that role overload is the most significant contributing factor of work stress among the four independent variables that which consist of role overload, role ambiguity, career development and work-life balance. This study identified that role overload is an important factor that contributing work stress. In a nutshell, only three independent variables which consist of role overload, career development and work-life balance are

affecting work stress of executives in BPO Call Center, Selangor. All independent variables that consist of role overload, role ambiguity, career development and work-life are appropriate to examine work stress among executives in BPO Call Center, Selangor.

### **5.3 Implication of research findings.**

According to this study few applied implications can be identified and recommendations can be made in order to reduce the work stress among BPO call center executives. From the result generated it has been indicated that role overload is the major contributor of work stress for the BPO call center executive in Selangor. BPO call center management must find solutions to get rid of role overload in BPO call center customer service executives and reduce their work stress. Based on previous researches, it has been proved that role overload is the leading contributor of work stress among the call center executive. Many researches has been discuss the relationship between role overload and work stress among employee. BPO management should take it as a serious issue and come up with some effective ways to overcome the problems related to work stress.

The main cause of role overload occur in call center is long working hours. Generally call centers working hours are twelve hours (12) per day. BPO call center executives work 24/7 rotating shift in a week. Most of the call center executive claim that they loss their time with family and friends. Long working hour's prologs to various health problems such as Cumulative Trauma Disorder (CTD), Occupational Overuse Syndrome (OOS), AND Work Related Upper Limb Disorder (WRULD) all allude to harm to the hand, harm, shoulder, neck and exacerbated by some aspect of the physical

working circumstances. Long working hours also may lead to Repetitive Strain Injury (RSI). Therefore, long working hours impact the work-life balance and health impairments of BPO call center executives in Selangor.

BPO call center management need to establish compress workweek implementation. The compress work schedule allows call center executives to work 35 to 40 hours a week. A compressed work schedule allows a call center executive to work a customary 35-40 hour workweek in less than the traditional number of workdays. Many compressed work plan alternatives might be arranged. For instance, a full-time employee scheduled for 40 hours per week could work four 12-hour days rather than five 8-hour days. The call center executive just work 4 days and get 3 days of leave to rest and relax. By implementing this compress work schedule BPO call center management can cut cost, save energy, alleviation of traffic concerns for employees and additional day off for employees while preserving their full-time income. Compress working hours may reduce the role overload, exhaustion and work stress among BPO call center executives in Selangor.

The second cause of role overload among executives is dual processing work in call center. According to Evans and Stanovich (2013), dual process is defined as cognitive tasks evoke two form of processing that contributes to observed behavior. The call center executives must able to diagnose the customers' problem immediately via computer and at the same time need to communicate and deliver the message clearly to the customers. Dual tasks working style increase the role overload and decrease the motivation level in nature. Call center executives encounter role overload in their job such as handling inbound and outbound calls, solving complex customers; problems,

rapid changes in task, emotional demands, computer malfunctions and unachievable KPIs. Eventually, dual process work style cause role overload and lead to work stress among BPO call center executives in Selangor.

BPO management needs to redesign the organization structure by work specialization and departmentalization. Normally, work can be performed more efficiently if call center executive allowed working in their specialized area. The purpose of restructuring is to make the organization more profitable and integrated. Therefore, the BPO management needs to analyze all job scope of call center executive and assign them according to their specialization and expertise. Ultimately redesigning the organization structure may reduce the role ambiguity, role overload which can cause work stress among the BPO call center executives in Selangor.

BPO call center executives have a perception that 'No pride associated with a call center position' means call center executive don't have the psychological contract with their management. Most of call center executives report that working in the call center is not their career plan. In most cases, employee force themselves to work in call center due to financial hardship, a lack of qualification or skills or lack of alternative job in market. Meanwhile, by nature the call center executives have very low self-esteem and motivation in their job. Call center executive feel no pride working at the call center and its regularly lead to stress and poor performance to them.

In order to solve this problem BPO management need to construct succession planning for newly joint call center executive. BPO management needs to involve call center representatives during the construction of succession planning. By establishing a new

succession planning process may increase the retention of quality call center executives because they identify the time consideration and skill development is being capitalized in them for the purpose of career development. Therefore, management needs to implement succession planning to call center executives and make them realize that there is a future in this field. Eventually, this may reduce the work stress of BPO call center executives.

#### **5.4 Limitation of the study**

In spite of the fact that the research has attained its aims, there were some unavoidable numbers of boundaries needed to highlight. Mainly, because of time limit this research was only conducted in two BPO call centers. Consequently, study has been conducted in Symphony BPO Solutions Sdn Bhd and Aegis BPO Solutions Sdn Bhd that located in Selangor. This study is carried out with 152 respondents received. Therefore, to simplify the result for larger groups, the study should involve more participants of difference level. Although this number of responses is sufficient for conducting the research, bigger sample size is expected to have better generalizability for the population at large.

The second limitation is cross sectional study has been practice in this study. Generally, cross sectional study do not generate useful evidence to determine the contributory relationship between variables. Therefore, the experiential significant relationship between the variables should be interpreted with attentiveness and no causal interferences should be made. Eventually, result of longitudinal study will be more appropriate to analyze more information related to this research.



Third limitation is research scope is narrow to one particular industry and position. This research focused on BPO call center customer service executives. Therefore, this research specifically analyzed on the problems, factors and recommendation related to BPO call center customer service executives.

### **5.5 Recommendation of future studies**

In order to create a better research in future, upcoming researcher should spend a lengthier time for data collection so that larger amount of feedback can be collected for better result analysis. Future researchers are fortified to conduct survey using other type of data collection methods beside Google survey in hope for higher response rate. A representative sample from different states, different industry and different specialization needs to be obtaining for better generalizability to the population at large. Longitudinal study is also urged in order to determine the causal relationship and to recognize whether variable impact vary over the time.

Second recommendation is researcher encouraged to investigate this research into a broader scope. This research will add if the research focuses on other industries' customer service executives such as third party administrators (TPA), banking industry and telecommunication industries. Ultimately, research other industries customer service executive may help researcher to understand the real scenario of work stress among call center executive.

## 5.6 Conclusion.

This research is carried out to analyze the effect of contributing factors on work stress among executives in Business Process Outsourcing Call Center in Selangor. This study was conducted in selected two Business Process Outsourcing Call Centers that located in Selangor. Total 152 respondents have participated in this study. The respondents are asked about their opinion on role overload, role ambiguity, career development and work-life balance as a contributing factor of work stress. Majority of the respondents are consist of female executives with less than 2 years of experience. The regression value for collective stressor effect stated as  $R^2$  (.651). Consequently, this value had discovered that role overload, role ambiguity, career development and work-life balance (independent variables) have 65.1 % of impact on work stress (dependent variable) among the executives in BPO Call Center, Selangor.

A total of five hypotheses were established for this study and all five hypotheses were accepted. The results shows that role overload and role ambiguity has a substantial and positive relationship with work stress. Career development and work-life balance demonstrate negative relationship with work stress. The finding shows that role overload is the highly contributing work stress among call center executives in BPO at Selangor. All four independent variables of this study is significant and appropriate for the study. Apart from that, future researcher are recommended to use other contributing factors of work stress such as role conflict, working condition, interpersonal relationship, performance metrics, monitoring, job clarity and changes in the workplace. Finally, this study had emphasized some implication, limitations of the study and recommendation for future research.

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**RESEARCH TITLE:**

**CONTRIBUTING FACTORS OF WORK STRESS IN CALL CENTER OF BUSINESS PROCESS OUTSOURCING (BPO) IN SELANGOR.**

**Dear Respondent**

My name is Kavitha Venugobal. I'm a Master's Degree student of Human Resource Management (HRM) from Graduate School of Othman Yeop Abdullah, Universiti Utara Malaysia (OYAGSB UUM). I'm currently conducting a research in the area of work stress among the call center executives in Business Process Outsourcing (BPO) in Selangor. Therefore, I would appreciate if you could answer all of the questions in the survey as the information you provide will influence the success of this research. It will take less than 15 minutes to complete the questionnaire. Please note that responses collected will be treated with the strictest confidentiality and will be used for academic purposes only. Your honest completion of this questionnaire will assist in generating information that will help business process outsourcing call centers to improve on work stress management, enhance quality of service and improved productivity.

Thank you very much for your time and cooperation in answering this questionnaire.

**Prepared By:**  
**Kavitha Venugobal**  
**Master of Human Resource Management,**  
**Othman Yeop Abdullah Graduate School of Business (OYAGSB),**  
**Universiti Utara Malaysia**

This section contains questions that will ask your personal information. For each question, please tick (/) in the most appropriate box or write your response in the space provided.

Gender:

1. ☐ Male      2. ☐ Female

Age group:

1. ☐ 19-29      2. ☐ 30-39      3. ☐ 40-49      4. ☐ 50-60

Highest education qualification:

1. ☐ Master Degree  
2. ☐ Bachelor Degree  
3. ☐ Certificate/Diploma  
4. ☐ SPM/STPM  
5. ☐ Others, please specify: .....

Current position:

1. ☐ Senior Manager  
2. ☐ Manager  
3. ☐ Assistant Manager  
4. ☐ Senior Executive  
5. ☐ Executive

Length of employment in this company (years):

1. ☐ Below than 2 years      2. ☐ 2 years to 5 years  
3. ☐ 5 years to 10 years      4. ☐ More than 10 years

Type of employment:

1. ☐ Permanent  
2. ☐ Contract  
3. ☐ Outsource (Agency)  
4. ☐ Expatriate

Monthly income (RM):

1. ☐ <2000      2. ☐ 2001 - 3000  
3. ☐ 3001 – 4000      4. ☐ 4001 - 5000  
5. ☐ > 5001

## SECTION B: WORK STRESS

*(Work stress: The harmful physical and emotional responses that occur when job requirements do not match the worker's capabilities, resources, and needs.)*

Please answer all the questions and please choose **ONE (1)** answer based on the following statements. The highest ranking, 5 (Strongly Agree), 4 (Agree), 3 (Neutral), 2 (Disagree) and the lowest, 1 (Strongly Disagree).

No	Elements	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1.	I have unachievable deadlines.	1	2	3	4	5
2.	I have to neglect some tasks because I have too much to do.	1	2	3	4	5
3.	I am unable to take sufficient breaks.	1	2	3	4	5
4.	I have to work very fast.	1	2	3	4	5
5.	I have a choice in deciding how I do my work.	1	2	3	4	5
6.	Staff are consulted about change at work.	1	2	3	4	5
7.	I feel that job pressures interfere with my family or personal life.	1	2	3	4	5
8.	At times I feel overloaded with the amount of work required to do.	1	2	3	4	5
9.	I feel that my job is negatively affecting my physical or emotional well-being.	1	2	3	4	5
10.	I have adequate control or input over my work duties.	1	2	3	4	5

### SECTION C: ROLE OVERLOAD

*(Role overload: A situation in which the various roles, assignments or work required of a role occupier exceed the amount of time and resources and energy available to the individual for their execution.)*

Please answer all the questions and please choose **ONE (1)** answer based on the following statements. The highest ranking, 5 (Strongly Agree), 4 (Agree), 3 (Neutral), 2 (Disagree) and the lowest, 1 (Strongly Disagree).

No	Elements	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1.	I never seem to have enough time to get everything done.	1	2	3	4	5
2.	I have too little time to perform my daily tasks.	1	2	3	4	5
3.	Times that I must work under time pressure.	1	2	3	4	5
4.	Worry that I will not be able to fulfill my tasks.	1	2	3	4	5
5.	It often seems like I have too much work for one person to do.	1	2	3	4	5
6.	It seems to me that I have more work at my job than I can handle.	1	2	3	4	5
7.	I often have too much to do in my job.	1	2	3	4	5
8.	I have too much work to do everything well.	1	2	3	4	5
9.	My work contains elements that are too demanding.	1	2	3	4	5
10.	The amount of work I am asked to do is fair.	1	2	3	4	5

### SECTION D: ROLE AMBIGUITY

*(Role Ambiguity: A situation where an individual does not have a clear direction about the expectations of his/her role in the job or organization.)*

Please answer all the questions and please choose **ONE (1)** answer based on the following statements. The highest ranking, 5 (Strongly Agree), 4 (Agree), 3 (Neutral), 2 (Disagree) and the lowest, 1 (Strongly Disagree).

No	Elements	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1.	My duties and work objectives are not clear to me.	1	2	3	4	5
2.	I feel certain about how much authority I have.	1	2	3	4	5
3.	Clear, planned goals and objectives for my job.	1	2	3	4	5
4.	I know that I have divided my time properly.	1	2	3	4	5
5.	I know what my responsibilities are.	1	2	3	4	5
6.	I know exactly what is expected of me.	1	2	3	4	5
7.	Explanation is clear of what has to be done.	1	2	3	4	5
8.	My authority matches the responsibilities assigned to me.	1	2	3	4	5
9.	Sometimes I am not sure how to complete all the tasks I have been assigned.	1	2	3	4	5
10.	Ambiguity of instructions at work.	1	2	3	4	5

### SECTION E: CAREER DEVELOPMENT

*(Career Development: A process which employees progress from a series of stages, and each stage characterized by different sets of development tasks, activities, and relationships.)*

Please answer all the questions and please choose **ONE (1)** answer based on the following statements. The highest ranking, 5 (Strongly Agree), 4 (Agree), 3 (Neutral), 2 (Disagree) and the lowest, 1 (Strongly Disagree).

No	Elements	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1.	My workplace provide me with opportunity to fully develop my skills and abilities.	1	2	3	4	5
2.	I receive appropriate recognition or rewards for good performance.	1	2	3	4	5
3.	I have been trained to develop my career.	1	2	3	4	5
4.	I have been given a personal development plan.	1	2	3	4	5
5.	I have been given work which has developed my skills for the future.	1	2	3	4	5
6.	My departmental officer has made sure I get the training I need for my future.	1	2	3	4	5
7.	I see a future for myself in a higher level role in this organization.	1	2	3	4	5
8.	My direct supervisor takes interest in my Career development.	1	2	3	4	5
9.	I have good access to development Opportunities in my current job.	1	2	3	4	5
10.	My organization has a formal mentoring Program for jobs like mine.	1	2	3	4	5

## SECTION F: WORK LIFE BALANCE

*(Work Life Balance: Are the absence of conflict between work and family or personal roles.)*

Please answer all the questions and please choose **ONE (1)** answer based on the following statements. The highest ranking, 5 (Strongly Agree), 4 (Agree), 3 (Neutral), 2 (Disagree) and the lowest, 1 (Strongly Disagree).

No	Elements	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree
1.	Inflexible working hours.	1	2	3	4	5
2.	Time off is more important to me than overtime.	1	2	3	4	5
3.	I would accept a promotion with higher pay even if it means working longer hours.	1	2	3	4	5
4.	My work life, family life and leisure time are not separated entities.	1	2	3	4	5
5.	I think about my job when I'm not working.	1	2	3	4	5

\*\*\*\*\* THANK YOU\*\*\*\*\*

## APPENDIX B - SPSS Outputs

### 1) Reliability Analysis of Work Stress.

#### Reliability Statistics

Cronbach's Alpha	N of Items
.761	10

### 2) Reliability Analysis of Role Overload.

#### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.902	.900	10

### 3) Reliability Analysis of Role Ambiguity.

#### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.752	.760	10

### 4) Reliability Analysis of Career Development

#### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.960	.962	10



## 5) Reliability Analysis of Work-life Balance

### Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.708	.711	5

### Descriptive Statistic.

#### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
workstress	152	10.00	47.00	34.0855	6.16865
roleoverload	152	10.00	50.00	36.5789	7.98054
roleambiguity	152	10.00	50.00	34.2039	4.99449
careerdevelopment	152	10.00	79.00	32.6645	9.13834
WB	152	5.00	25.00	16.0461	4.45632
Valid N (listwise)	152				

### Normality Test.

#### Tests of Normality

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
WS	.158	29	.062	.955	29	.252
RO	.110	29	.200 <sup>*</sup>	.978	29	.798
RA	.110	29	.200 <sup>*</sup>	.972	29	.613
CD	.121	29	.200 <sup>*</sup>	.935	29	.072
WLB	.144	29	.127	.950	29	.180

a. Lilliefors Significance Correction

\*. This is a lower bound of the true significance.

## 1. Factor Analysis – Role Overload (Independent).

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.856
Bartlett's Test of Sphericity	Approx. Chi-Square	220.798
	df	45
	Sig.	.000

### Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.124	61.235	61.235	6.124	61.235	61.235
2	1.141	11.406	72.641	1.141	11.406	72.641
3	.836	8.362	81.003			
4	.534	5.337	86.340			
5	.492	4.920	91.260			
6	.355	3.545	94.805			
7	.175	1.746	96.551			
8	.138	1.379	97.930			
9	.118	1.175	99.106			
10	.089	.894	100.000			

Extraction Method: Principal Component Analysis.

## 2. Factor Analysis – Role Ambiguity (Independent).

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.738
Bartlett's Test of Sphericity	Approx. Chi-Square	212.841
	df	45
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.039	50.393	50.393	5.039	50.393	50.393
2	1.921	19.213	69.606	1.921	19.213	69.606
3	1.166	11.658	81.264	1.166	11.658	81.264
4	.612	6.119	87.383			
5	.430	4.303	91.686			
6	.255	2.552	94.238			
7	.244	2.444	96.682			
8	.171	1.705	98.387			
9	.103	1.031	99.418			
10	.058	.582	100.000			

Extraction Method: Principal Component Analysis.

### 3. Factor Analysis – Career Development (Independent). KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.805
Bartlett's Test of Sphericity	Approx. Chi-Square	281.936
	df	45
	Sig.	.000

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.726	67.261	67.261	6.726	67.261	67.261
2	.959	9.594	76.855			
3	.706	7.060	83.915			
4	.558	5.578	89.492			
5	.381	3.807	93.300			
6	.241	2.412	95.712			
7	.199	1.990	97.702			
8	.134	1.338	99.039			
9	.068	.685	99.724			
10	.028	.276	100.000			

Extraction Method: Principal Component Analysis.

#### 4. Factor Analysis – Work-life Balance (Independent).

##### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.686
Bartlett's Test of Sphericity	Approx. Chi-Square	111.979
	df	45
	Sig.	.000

##### Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.790	37.897	37.897	3.790	37.897	37.897
2	2.009	20.088	57.984	2.009	20.088	57.984
3	1.329	13.290	71.275	1.329	13.290	71.275
4	.823	8.232	79.506			
5	.468	4.677	84.183			
6	.417	4.168	88.352			
7	.398	3.985	92.337			
8	.329	3.287	95.624			
9	.290	2.898	98.522			
10	.148	1.478	100.000			

Extraction Method: Principal Component Analysis.

#### 5. Factor Analysis – Work Stress (Dependent).

##### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.605
Bartlett's Test of Sphericity	Approx. Chi-Square	153.883
	df	45
	Sig.	.000

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.200	42.002	42.002	4.200	42.002	42.002
2	2.096	20.959	62.961	2.096	20.959	62.961
3	1.077	10.773	73.735	1.077	10.773	73.735
4	.765	7.646	81.380			
5	.584	5.844	87.225			
6	.385	3.848	91.073			
7	.377	3.774	94.847			
8	.267	2.667	97.515			
9	.179	1.794	99.309			
10	.069	.691	100.000			

Extraction Method: Principal Component Analysis.



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## Correlations Analysis

1. Correlations Analysis for Role Overload, Role Ambiguity, Career Development, Career Development and Work Stress.

**Correlations**

		workstress	roleoverload	roleambiguity
workstress	Pearson Correlation	1	.794	.251
	Sig. (2-tailed)		.000	.002
	N	152	152	152
roleoverload	Pearson Correlation	.794	1	.197
	Sig. (2-tailed)	.000		.015
	N	152	152	152
roleambiguity	Pearson Correlation	.251	.197	1
	Sig. (2-tailed)	.002	.015	
	N	152	152	152
WB	Pearson Correlation	-.183	-.250	.365
	Sig. (2-tailed)	.024	.002	.000
	N	152	152	152
careerdevelopment	Pearson Correlation	-.166	-.291	.350
	Sig. (2-tailed)	.040	.000	.000
	N	152	152	152

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

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

**Correlations**

		WB	careerdevelopment
workstress	Pearson Correlation	-.183	-.166
	Sig. (2-tailed)	.024	.040
	N	152	152
roleoverload	Pearson Correlation	-.250	-.291
	Sig. (2-tailed)	.002	.000
	N	152	152
roleambiguity	Pearson Correlation	.365	.350
	Sig. (2-tailed)	.000	.000
	N	152	152
WB	Pearson Correlation	1	.877
	Sig. (2-tailed)		.000
	N	152	152
careerdevelopment	Pearson Correlation	.877	1
	Sig. (2-tailed)	.000	
	N	152	152

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

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

## Multiple Regression Analysis

- Multiple Regressions for Role Overload, Role Ambiguity, Career Development, Work-life Balance and Work Stress.

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.807 <sup>a</sup>	.651	.641	3.69462

a. Predictors: (Constant), WB, roleoverload, roleambiguity, careerdevelopment

b. Dependent Variable: workstress

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3739.303	4	934.826	68.484	.000 <sup>a</sup>
	Residual	2006.585	147	13.650		
	Total	5745.888	151			

a. Predictors: (Constant), WB, roleoverload, roleambiguity, careerdevelopment

b. Dependent Variable: workstress

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.729	2.454		3.150	.002
	roleoverload	.606	.042	.784	14.501	.000
	roleambiguity	.122	.069	.099	1.780	.077
	careerdevelopment	.141	.070	.209	2.019	.045
	WB	-.287	.142	-.207	-2.025	.045

a. Dependent Variable: workstress

Normal P-P Plot of Regression Standardized Residual

