

JOB BURNOUT AND WORK ENGAGEMENT IN
COURIER SERVICE ORGANIZATIONS, MALAYSIA - AN
INTEGRATION OF JOB DEMANDS-RESOURCES
MODEL AND THEORY OF SOCIAL EXCHANGE

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**JOB BURNOUT AND WORK ENGAGEMENT IN COURIER SERVICE
ORGANIZATIONS, MALAYSIA - AN INTEGRATION OF JOB
DEMANDS-RESOURCES MODEL AND THEORY OF SOCIAL
EXCHANGE**

By

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ABSTRACT

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Kong Hoi Yoon

The growth of digital economy in Malaysia and worldwide countries will continue to contribute to the growth of courier service. The dispatch workers therefore are expected to be given higher workloads in terms of physical and psychological work commitment. Courier companies are experiencing higher staff turnover rate among the dispatch workers due to burnout and work engagement (WE) issues. The purpose of this study is to test the viability of current research model that integrates the JD-R model and theory of social exchange in explaining the dispatch workers' reaction on job demands (JD), job resources (JR), and corporate volunteerism (CV) on their WE and burnout.

The used of JD-R model in literature is not something new. However, compared to white collar workers, research on blue collar workers was limited. Blue and white collar workers may reacts differently on the dimensions of JD and JR. As burnout and WE behavior could influence a courier company's key service: mail items delivery, it is thereby important to evaluate how the studied variables and its dimensions related to each other from the blue collar workers' perspective.

Multi-stage sampling method was employed so that the selected dispatch worker respondents could represent the population more accurately. Three hundred fifty

completed questionnaires were collected from company's assigned job dispatch workers. Covariance Based-SEM approach was used to test and confirm current study's hypotheses. The result shows that JD and one of its dimension, physical demands related to burnout positively. Another dimension of the JD: psychological demands did not created significant direct effect on burnout. Job resources and one of its dimension, social support related to WE positively but another dimension of JR: decision latitude, had no significant effect on WE. In addition, dispatch workers who valued and understand the motive of corporate volunteering activities were more engaged to work hard. Although the JR's dimension: decision latitudes did not create a direct significant effect on burnout, but the dimension construct had moderated the effects created by physical and psychological demands on burnout.

The study results can provide useful indications to higher officials to address the issues related to job burnout and WE in the workplace. For example, to decrease burnout, appropriate levels of JD and physical demands should be designed. However, during peak delivery season, the assignment of higher JD and physical demands is inevitable. To moderate the effects of JD and physical demands on burnout, appropriate level of decision latitude (a dimension of JR) should be given, such as assigning specific job task that can map the respondent's work interest or knowledge.

In summary, the effectiveness of the provision of decision latitude's element to workers depends on the company management's objective. When the workers were given higher physical workload in specific time period, decision latitude

will work in reducing burnout. However, during normal working circumstances, decision latitude will not be able to enhance the worker's WE.

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APPROVAL SHEET

This thesis entitled **“JOB BURNOUT AND WORK ENGAGEMENT IN COURIER SERVICE ORGANIZATIONS, MALAYSIA - AN INTEGRATION OF JOB DEMANDS-RESOURCES MODEL AND THEORY OF SOCIAL EXCHANGE”** was prepared by KONG HOI YOON and submitted as partial fulfillment of the requirements for the degree of Master of Philosophy at Universiti Tunku Abdul Rahman.

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Yours truly,

Kong Hoi Yoon

DECLARATION

I **Kong Hoi Yoon** hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at UTAR or other institutions.

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LIST OF ABBREVIATIONS

AB	Absorption
AMOS	Analysis of moment structure
AVE	Average variance extracted
CB-SEM	Covariance based - structural equation modelling
CFA	Confirmatory factor analysis
CR	Composite reliability
CS	Co-worker support
CSR	Corporate social responsibility
CV	Corporate volunteerism
CY	Cynicism
DA	Decision authority
DE	Dedication
EFA	Exploratory factor analysis
ERI	Effort reward imbalance
EX	Exhaustion
JB	Job burnout
JCQ	Job content questionnaire
JD	Job demands
JDC	Job demand control
JDCS	Job demand control support
JD-R	Job Demands-Resources
JR	Job resources
MBI	Maslach Burnout Inventory
MBI-ES	MBI-Educator Survey
MBI-GS	MBI-General Survey
MBI-HSS	MBI-Human Services Survey
MCMC	Malaysian communications and multimedia commission
ML	Maximum likelihood
NGOs	Non-government organizations
OLBI	Oldenburg Burnout Inventory
PE	Professional efficacy
PhyD	Physical demands

PsD	Psychological demands
SD	Skill discretion
SEM	Structural equation modelling
SET	Social Exchange Theory
SMBM	Shirom–Melamed Burnout Measure
SPM	Sijil Pelajaran Malaysia
SPSS	Statistical Package for Social Science
SS	Supervisor’s support
STPM	Sijil Tinggi Persekolahan Malaysia
U	Understanding
U.P.S	United Parcel Service
UWES	Utrecht Work Engagement Scale
V	Values
VFI	Volunteer functions inventory
VI	Vigour
VIF	Variance inflation factor
WE	Work engagement

CHAPTER 1

INTRODUCTION

1.1 Background of Study

The growth of global and Malaysia's digital economy has obviously created a big impact on the growth of courier services industry (Izzah, Rifai & Yao, 2016). The increase practice of e-shopping through e-commerce platforms like Zalora, Lazada, and Shopee is boosting the demand for courier service. Many companies choose to use the e-commerce platforms to market their products as it would be more cost saving than building physical outlets in rural areas.

Courier Industry Development Plan was introduced by the Malaysian Communications and Multimedia Commission (MCMC) in 2012. The plan aimed to encourage courier companies to operate their own distribution network or to form-strategic alliances with other networking companies. Besides that, MCMC has also implemented various development and regulatory initiatives throughout year 2015 to increase the operation's efficiency of courier industry. Therefore, the revenue growth among Malaysian top ten courier service providers have increased from year 2014 to 2016 (MCMC, 2014; The logistics and trade facilitation masterplan, 2018) (see Table 1.1).

In 2017, the logistics sector in Malaysia has performed well with a year-to-date average revenue growth of 22.8%, and has become one of the prime sectors in the contribution of national gross domestic income (The logistics and trade facilitation masterplan, 2018) (see Table 1.1).

Table 1.1: Total Revenue and Yearly Revenue Growth Percentage of Malaysian Top 10 Courier Service Providers from 2010 to 2016

Year	2010	2011	2012	2013	2014	2015	2016	2017
Total Revenue (RM million)	1,740 ^a	2,030 ^a	2,120 ^a	2,210 ^a	2,440 ^a	2,800 ^a	2,900 ^a	n/a
Yearly Revenue Growth (%)	-	16.67 ^a	4.43 ^a	4.25 ^a	10.20 ^a	14.75 ^a	3.57 ^a	22.8% ^b

Source: ^a MCMC, 2017,

^b The logistics and trade facilitation masterplan, 2018

The growth of courier business has increased the demand of call centre and dispatch workers (see Table 1.2). As the quantity of courier items increased, more dispatch manpower was needed to expedite the delivering of outgoing and incoming mail items (Joerss, Schröder, Neuhaus, Klink & Mann, 2016). Therefore, the number of courier dispatch workers had drastically increased from 2014 to 2016 (see Table 1.2).

Table 1.2: The Employment Growth Percentage within Courier Industry According to Job Function from 2012 to 2017

Year	Administrative (*)	Call Centre (*)	Dispatch (*)	Sorting (*)	Others (*)	Total
2012	1,310 (-)	1,358 (-)	4,746 (-)	730 (-)	1,738 (-)	9,882 (-)
2013	1,524 (16.3%)	1,486 (9.4%)	5,151 (8.5%)	1,394 (91.0%)	1,086 (-37.5%)	10,599 (7.3%)
2014	1,571 (19.9%)	1,721 (26.7%)	5,574 (17.4%)	1,469 (101.2%)	1,007 (-42.1%)	11,342 (14.8%)
2015	1,727 (31.8%)	1,620 (19.3%)	6,524 (37.5%)	906 (24.1%)	1,236 (-28.9%)	12,013 (21.6%)
2016	1,910 (45.8%)	2,030 (49.5%)	7,726 (62.8%)	818 (12.1%)	1,797 (3.9%)	14,281 (44.5%)
2017	1,799 (37.3%)	2,335 (71.9%)	7,703 (62.3%)	955 (30.8%)	1,823 (4.9%)	14,615 (47.9%)

n.b.: * refers to the employment growth rate as compared to 2012 of the respective job function

Source: MCMC, 2018

Dispatch worker is classified as a blue collar worker who performs manual labour and typically works with their hands. Dispatch worker needs to sort

routes, monitor courier performance and enforce the established delivery protocol. Dispatch worker's task cannot be easily replaced by automation machine and/or computer system compared to call center worker. For example, dispatch worker needs to proactively dealing with the on-going challenges of maintaining and increasing customer's satisfaction which may change rapidly.

Automation machine can be used if the performed task is repetitive. Dispatch worker on the other hand is playing important roles in solving vary problems that may delay the delivery schedule such as traffic jam and incomplete or incorrect delivery address. Furthermore, automation machine and/or computer system is very costly to be installed and maintained. In other words, machine cannot do variety of tasks which can be done by dispatch workers. Any shortages of skilled workers (precisely, dispatch workers) therefore, could disturb the on-time delivery schedule.

To sustain in the industry, employer is expecting their dispatch workers to work harder so that the mailed items can be delivered as fast as possible and in perfectly good in condition. Statistical data that can show the turnover rate among dispatch workers in Malaysian courier service industry however is not published for public view. To support the study of dispatch workers, data provided by United Parcel Service (U.P.S) (one of the high performance courier service providers in United State) was used as reference. The data showed that the annual turnover rate among courier workers could reach as high as 400% (United Parcel Service, 2013).

Contents shown in Table 1.2 are used to further support the need to study the dispatch workers. From Table 1.2, the number of employed dispatch workers was remained constant in 2016 and 2017 although the local and worldwide digital economy is growing. The increased of dispatch workload could have contributed to the high turnover rate of dispatch workers. In fact, the turnover rate among dispatch workers was relatively higher than workers that perform other job tasks such as administrative and call centre workers, sorters and others (MCMC, 2017).

In view of the importance of dispatch worker's work tasks and the high job turnover rate, this study therefore intends to find out the reasons that could cause the dispatch workers to feel burnout and disengage in work. The study results hopefully can provide useful indications to the management team of courier companies to solve the issue.

Studies have showed that excessive job demands (JD) such as heavy workload in terms of time and efforts could cause employees to experience burnout such as the feel of being exhausted or stressful (Maslach, & Leiter, 2016) and such feelings will consecutively cause the worker to resign. Job resources (JR) can moderate the negative effect of excessive JD on burnout and can influence work engagement (WE) directly (Van Rafaelghem et al., 2018).

For example, workers will feel less burnout and physically and/or emotionally more engage in work if (1) they were given certain level of decision latitude that could allow them to choose what should be done in a particular situation (Elnaga

& Imran, 2014; Namasivayam, Guchait & Lei, 2014); and (2) co-worker and supervisor can provide tangible and intangible supports to the workers (Airila et al., 2014; Scott, Zagenczyk, Schippers, Purvis & Cruz, 2014).

Overall, JD, burnout, WE and JR are interrelated and are common phenomena in real working environment (Van den Broeck et al., 2017). Tangible and intangible losses due to high worker's turnover as a result of burnout and work disengagement can cause an organization to lose billions of dollar in a year (Li & Chen, 2018). Therefore, employers are dedicated to minimize the incident of burnout and find ways to increase WE.

In reference to the social exchange theory, the dispatch workers may increase their WE in terms of vigorous and dedication contributions if employers can provide continuous volunteer opportunities for them to participate in community service activities (Blau, 1968; Cychota, Ferrante & Schroeder, 2016). Corporate volunteerism (CV) is part of a company's corporate social responsibility framework and is commonly used to improve and/or sustain the corporate image (Slack, Corlett & Morris, 2015). As JD, JR, burnout, WE, and CV are interrelated constructs, this dissertation therefore integrates the JD-R model and social exchange theory.

1.2 Problem Statement

The dispatcher worker's role is very challenging (So, 2014) although they are just lower management staff. Dispatch worker's job performance is one of the major determinants in helping courier companies to deliver courier parcel,

documents and goods timely and reliably. Courier companies expect the dispatch to have the capacity to expedite the delivery of courier items and ability to sort the outbound and inbound mail items persistently, without damaging the posted items (Joeress et al., 2016).

Being a blue collar worker, heavy physical works that involve loading and unloading of goods are expected. To perform their work task efficiently, they need to be flexible in contributing additional working hours and working at night shifts. Excessive JD (such as requesting the workers to perform overloaded tasks or tasks that are conflicting with the worker's self-interest) however may cause them to experience burnout.

On top of that, dispatch workers may be less engaged in work if they were not given certain level of discretion to carrying out their job or when the supervisor and co-workers were not supportive. In other words, JR could be one of the main predictors for WE (Bakker, Demerouti & Sanz-Vergel, 2014; Breevaart, Bakker, Demerouti & van den Heuvel, 2015). Adequate JR is required not only to foster better WE; JR also can moderate the negative effect created by JD on burnout (Schaufeli & Taris, 2014). For example, in hard-pressed operations, assistance given by co-workers could reduce the chance of the assigned worker from feeling being burnout.

The social exchange theory proposed that if volunteering is significant to the workers, and if the employer encourages corporate volunteerism, the workers then will be more engaged in work (Allen, 2013). Jones, Willness and Madey

(2014) also asserted that workers would feel more attached to their company if they were involved in corporate volunteering activities. In other words, dispatch workers' engagement in work can be increased if the courier company activates corporate volunteering activities (Korschun, Bhattacharya & Swain, 2014).

Corporate volunteerism that was carried out by a company can be more meaningful if the company's workers support and engage themselves in the charity activity (Allen, 2013; Slack et al., 2015). Since 2016, the public agencies and Non-Government Organizations (NGOs) in Malaysia have put in considerable efforts to encourage companies to carry out volunteering activities (Hamzah, Suandi, Shah, Ismail & Hamzah, 2016). To support the public agencies and NGOs' efforts, it is important to examine how the blue collar workers: dispatch workers perceive corporate volunteering activities and how such perception can encourage them to be more engaged in work. Generally, reducing dispatch worker's feelings of being burnt out and enhancing their WE could assist courier companies to retain their workers and sustain in the logistic industry. Therefore, JD-R model is used as the basic theoretical framework in this study to examine the effects caused by JD and JR on burnout and WE.

As research on the effect that can be generated by the implementation of CV practice in Malaysia is still lacking, this study fills the literature gap by integrating the JD-R model and theory of social exchange because both models could explain ways that can encourage the dispatch workers to enhance their WE.

1.3 Research Questions

To solve the problems of this research, this dissertation needs to answer the following questions:

- (i). How JD can relate the dispatch worker's perception of being burnout in job?
- (ii). How the dimensions of JR (dispatch worker's decision latitude and social support) can change the dispatch worker's WE and in the meantime, moderate the relationship between JD and burnout?
- (iii). How can the dispatch worker's perception towards the CV programs able to affect their engagement in work?

1.4 Research Objectives

The main objective of this study is to test the viability of current research model that integrates the JD-R model and theory of social exchange in explaining courier's dispatch workers' reaction on JD, JR, and CV on their WE and burnout perceptions. Specifically, this dissertation intends:

- (i). To examine the direct positive effect created by JD on burnout;
- (ii). To examine the JR's direct positive effect on WE and its moderating effect between JD and burnout; and
- (iii). To examine the direct positive effect of CV on dispatch workers' WE.

1.5 Significances of Research

The present study will develop existing theoretical knowledge frameworks about burnout and WE that are explained by the JD-R model and theory of social

exchange. This study's result that involves the integration of both theories could provide more insights to scholars on factors that could affect their target respondent's burnout and WE behaviors. It may be significant and beneficial to the following entities.

1.5.1 Significance of Research to Academics

The added value of CV is related to benefits that can be generated to the company's stakeholders. According to social exchange theory, CV is an expression of reciprocity, in which CV gives chance to employees to take time out from their work hours to develop a more meaningful social networking. If the dispatch workers are interested in participating in corporate volunteering activities, a more meaning social networking with staffs and specific community could be formed. The positive outcomes may improve the workers' current cognitive, affective and psychomotor skills and eventually the workers will become more engage in work.

Past researchers also have been developing the JD-R model by examining additional variables such as personal resources, connectedness, and organizational commitment or integrated the model with another theory model. JDR model explains that JR can affect individual's WE. Past researchers (Allen, 2013; Slack et al., 2015) asserted that CV can affect a person's engagement in work as well.

The examination of structural effects among JDR model's constructs as result of CV however is still limitedly tested in literature. This study therefore intends to

fill the literature gap and enrich the JDR model and social exchange theory. The structural relationship between the JD-R and CV variables therefore can enrich the burnout and WE literature.

Many researchers have been developing representative dimensions for each JD-R's construct by grouping a number of measurement items that have been tested in previous studies. For example, Trépanier, Fernet, Austin, Forest and Vallerand (2014) asserted that two dimensions can be used to measure the construct of JD: physical demands and psychological demands. However, past researchers tended to focus on testing the statistical significant effect of only one or both dimensions on burnout and/or WE.

So far, studies that used JD-R model as basic theoretical framework has been concentrated mainly in Europe countries while social exchange theory's studies were widely carried out in Asia countries. The integration of both JD-R model and social exchange theory thus can extend the literature of burnout and WE.

1.5.2 Significance of Research to Policy Makers, Businesses and Communities

As mentioned in the previous subtopic 1.51: Significance of research to academics, CV can create additional benefits the company's stakeholders. Despite the dispatch workers' low level of job position, their work behaviour could influence the service quality and delivery speed of all courier items. If the hypothesis of CV and WE is supported, the partial problems related to WE would then able to solve. The company will become more capable to cater additional

businesses at optimum manpower cost. Through corporate volunteering activities, the betterment in terms of financial and/or social welfare of the assisted community will improve and this will eventually improve or sustain the company's image and/or reputation.

In view of the added value that can be created by CV, the framework that's integrates the theories of JD-R model (that measure the effect of JD and JR on burnout and WE) and social exchange (that estimate the effect of CV on WE), could then provide useful indications for higher officials to address the issues related to burnout and WE in the workplace. A careful framework that involves an appropriate level of JD and JR; and CV programme will create a win-win situation among various entities (businesses, communities and policy makers) as a whole.

On top of examining the overall effect that can be generated by each construct on other constructs, individual effect that can be created by each dimensions of the examined construct has been tested in this study as well. For example, if the hypothesis of psychological demands (a dimension of JD) on burnout were supported while the hypothesis of another dimension of JD, physical demand were not supported, employers could just consider modifying only on the criteria or items that are used to measure the psychological demand. In brief, hypothesize the effect that can be created by each dimension of an examined construct could provide a better indication to industry decision makers in revising their planning which aims to reduce the dispatch workers' turnover.

1.6 Organization of the Dissertation

For readers to recognize the complexity and reasoning of burnout and WE among the dispatch workers, the contents of the dissertation are divided into five chapters. Chapter one introduces the background of studied area so that readers could understand the basic roles and importance of JD, JR, and CV on burnout and WE among courier dispatch workers. This can help reader to understand the dilemmas that have been confronted by courier companies' policy makers, and why changes need to be done to overcome the problems.

Chapter two is focusing on reviewing literature related to the theoretical frameworks of JD-R model and social exchange theory, and past studies conceptual frameworks (research models, research methodology and data analysis methods) that had used JD-R model or social exchange theory as the basic theoretical frameworks. By reviewing the literature critically, current author could thereby construct the conceptual frameworks of this study, which are discussed in-depth in chapter three. In addition, anticipated limitations of each research methods employed of this study are clearly discussed and ways to reduce the limitations are presented as well.

In chapter four, critical data findings are reported and interpreted so that appropriate implications to courier companies' decision makers can be suggested. Comparison between present and past studies' hypotheses were made and discussion is presented to explain why current hypothesis is congruence or contradict with past studies' hypothesis. Finally, the summary and conclusion, managerial implications, limitation of current research and recommendations for

future research is well discussed in chapter five.

1.7 Summary of Introduction

In brief, this chapter aims to detect the information gap. The demand for job dispatching task is increasing as the worldwide and Malaysia digital economy is growing. Courier service providers however are having problems to retain or employ additional job dispatch workers. Therefore, this study aims to solve the issues related to job burnout and WE among the workers. The examination of dilemma faced by the courier service organizations had assisted the author to form the appropriate research questions and objectives for further testing. Overall, this study aims to enrich the literature of job burnout and WE; and to provide useful indication to management team of courier service organization in planning strategic policies that can overcome the problems. The following chapter will focus on detecting the literature gap.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

A stream of overview on past studies are discussed in attempt to point out the gap appeared within the literature. The overview of relevant past studies' conceptualization and theoretical framework on burnout and work engagement are first examined, followed by a thorough analysis on JD-R model and theory of social exchange as it concerned in this study. The last section would be the sum up of the main review points.

2.2 The Conceptualization of Burnout

The term and the conceptualization of burnout were introduced by Freudenberger in the early 1970s (Freudenberger, 1974). Freudenberger defined burnout as a state of fatigue or frustration which was caused by failure to yield expected rewards (Freudenberger, 1974; Freudenberger & Richelson, 1980). The definition however was emphasizing on individuals' relational transactions in work environment which may not be able to validate an individual's response towards stress (Bakker et al., 2014).

Therefore, Maslach (1982) proposed to modify the definition of burnout so that it can be more related to people who were experiencing work stress. Three dimensions were introduced to measure burnout: (1) emotional exhaustion (that describe the feelings of loss or concern or being overextended which could deplete one's emotional and physical resources); (2) depersonalization (that

describe the establishment of inappropriate attitudes toward other people which can then form the feeling of pulling out); and (3) diminished sense of personal accomplishment as a result of depression, low self-esteem, or low morale, which can reduce one's productivity or capability. Overall, the dimensions of burnout able to incorporate various reactions and responses that would be experienced by a person as a result of stress (Yan & Xie, 2016).

Studies carried out by Freudenberger, Maslach and the following researchers were concentrated on caregiving and service occupations, in which embedded in context of the relationship between provider and recipient (Maslach, Schaufeli & Leiter, 2001). For example, many past researchers supported that burnout could undermines certain professionals' work performance, for example police officers (Smoktunowicz et al., 2015) and lawyers (Bergin & Jimmieson, 2014), teachers (Skaalvik & Skaalvik, 2014), nurses (Vander Elst et al., 2016), doctors (Gunasingam, et al., 2015) and caregivers (Maslach & Leiter, 2016).

In measuring the construct of burnout, Maslach Burnout Inventory (MBI) was introduced to capture the three dimensions: emotional exhaustion, depersonalization, and personal accomplishment (Maslach, Jackson & Leiter, 1981). Currently, MBI is known as the MBI-Human Services Survey (MBI-HSS) and was proposed to measure the burnout effects of people working in human services, health care and education (Maslach, Jackson & Schwab, 1996). It conceptualizes burnout as a discrete variable ranging from low to high. The high scores on the emotional exhaustion and depersonalization sub-scales and low scores on the personal accomplishment subscale are symptoms of high level

burnout (Shanafelt et al., 2015).

The emotional exhaustion dimension reflects the types and level of stress experienced by a person (Maslach et al., 2001). Depersonalization refers to a person's uncaring feeling towards others (either colleagues or customers). Meanwhile, lack of personal accomplishment refers to a decrease in a person's feeling of competence and successful achievement in work. For example, employees would feel burnout when they perceived that they are not accomplishing anything worthwhile at work.

Later, Schaufeli, Dierendonck and Gorp (1996) developed Maslach Burnout Inventory-General Survey (MBI-GS) as an alternative measure of burnout in response to the increasing interest in measuring burnout within occupations that are not so people oriented. The MBI-GS does not concentrate on the service relationship, but generally more on the performance of the job (Maslach, Jackson, Leiter, Zalaquett & Wood, 1997). The three subscales of MBI-GS (Exhaustion, Cynicism and Professional efficacy) are parallel with those of the MBI (Maslach et al., 1997). The exhaustion items are generic in the MBI-GS, not like the MBI which make prominent on emotions and direct references to service recipients (Maslach et al., 1997).

Some of the changes from the MBI are quite direct (Maslach et al., 1997). The variable of depersonalization has been replaced by the variable of cynicism (which is related to the formation of a distant attitude towards the work itself). For example, workers do not care whether their work has been adequately

performed). On top of that, professional efficacy is proposed to replace personal accomplishment. In MBI-GS, professional efficacy is alike in many ways to personal accomplishment in MBI (Maslach et al., 1997). In brief, the concentration of MBI-GS is more extensive; that includes both social and non-social parts of work. MBI-GS is related to occupational accomplishments and the scale concentrates are more specific than MBI on expectation (Maslach et al., 1997).

In summary, burnout is described as a state of exhaustion: feeling like nothing much can be contributed to the job as a result of depletion of one's emotional and internal resources. The employees would then make an attempt to distance themselves from their work and feel increasingly cynical about the positive value that they can contribute to the job (term as cynicism). The thoughts of exhaustion and cynicism would eventually cause the diminishing of employees' personal accomplishment and job performance (Schaufeli & Salanova, 2014).

The conceptualization of MBI-GS has been validated by studies that involved various occupational groups: maintenance workers (Asensio-Martínez et al., 2019), nurses (Adriaenssens, De Gucht & Maes, 2015), software engineers (Cook, 2015), and managers (Maldonado-Macías, Camacho-Alamilla, Torres, Alcaraz & Limón, 2015).

Although the MBI-GS's definition of burnout is most widely used to evaluate burnout (Leiter, Maslach & Frame, 2014), other instruments have been developed to expand the assessment of the burnout syndrome as well: Burnout

Measure (Malach-Pines, 2005; Pines & Aronson, 1988; Pines, Schaufeli, Maslach & Marek, 1993); Shirom–Melamed Burnout Measure (SMBM; Melamed, Kushnir, & Shirom, 1992; Shirom, 1989, 2003); and the Oldenburg Burnout Inventory (OLBI; Demerouti, Bakker, Vardakou, & Kantas, 2003; Halbesleben & Demerouti, 2005).

The concept of burnout has been defined and measured differently in the literatures. For example, Burnout Measure assesses burnout by measuring the effect of exhaustion. Meanwhile, SMBM has breakdown the job burnout's measurement into three perspectives: physical, emotional and mental exhaustion. Comparatively, OLBI assesses burnout by including the examination of an additional item, disengagement; on top of engagement items.

As compared to other measures, MBI-GS is the most widely used to measure burnout in the literature (Cook, 2015) because the MBI-GS instrument is applicable to people working in human services such as health care and education (Cook, 2015); and maintenance, manufacturing and other professions (Nehari Talet & Mat Zina, 2016). Therefore, the present research is adopting three MBI-GS's burnout dimensions: exhaustion, cynicism and professional efficacy.

2.3 The Conceptualization of Work Engagement

The term engagement at work was first conceptualized by Kahn (1990) (Danish, Ahmad & Khan, 2014). In Kahn's (1990) need-satisfying approach, engagement is referring to the level of physical and mental attachment such as physical

presence, attentive cognitive processing and emotional bond that a person wish to commit in their job. Such attachment could be materialized if they feel that their work contribution is meaningful and their safety in the workplace is well taken care.

Work engagement has also been considered as an independent and distinct concept that is negatively related to burnout. In other words, WE is related to vigour (that shows the levels of energy and mental resilience that a person is willing to devote while working), dedication (that reflects the level of commitment that a person is willing to contribute in their work), and absorption (that denotes the level of concentration and happiness a person will sense while working) – which is highlighted in Bakker, Schaufeli, Leiter and Taris (2008) and Schaufeli et al.'s (2002) studies. Vigour and dedication are viewed as direct inverse of exhaustion and cynicism (two core symptoms of burnout) (Schaufeli and Taris, 2005).

Basically, the conceptualization of WE was complex and related to worker's health and wellbeing (Bakker, Demerouti & Schaufeli, 2003; Demerouti et al., 2001; Hakanen, Bakker & Demerouti, 2005; Montgomery, Peeters, Schaufeli & Ouden, 2003; Salanova, Grau, Cifre & Llorens, 2000; Salanova, Agut & Peiró, 2005; Schaufeli & Bakker, 2002; Schaufeli et al., 2002; Schaufeli, Taris & Van Rhenen, 2008; Sonnentag, 2003).

In brief, the continuum that comprised dedication and cynicism has been marked as “identification” (Gonzalez-Roma, Schaufeli, Bakker & Lloret, 2006). Work

engagement on the other hand is related to the level of energy and strong identification with one's work, while burnout is described by the inverse (low level of energy and poor identification with one's work). From the in-depth interview carried out by Schaufeli et al., (2001), absorption was incorporated as the third construct of WE. Based on the definition of WE that includes vigour, dedication and absorption, Utrecht Work Engagement Scale (UWES) has been developed. Initially, UWES had 24 items, comprised of positively rephrased MBI-items. In this study, UWES is used to measure the construct of engagement because the measurements have been found statistically significant in many relevant studies (Bailey, Madden, Alfes & Fletcher, 2017).

2.4 The Job Demands-Resources Model

The JD-R model suggests that JD (such as engaging higher workload or needs workers to work harder and faster) and JR (for example giving better supervisor's support and awarding higher authority to workers in making certain decisions) could affect a worker's level of burnout (Demerouti, et al., 2001; Van den Broeck, 2013; Van den Broeck, De Cuyper, Luycks & De Witte, 2012).

Job demands refer to the aspects of a job that are required continual physical and/or psychological effort or skills (Demerouti et al., 2001). Jobs that required excessive physical demand contribution (such as heavy manual workloads) and psychological demand (such as meeting unrealistic deadlines) will cause the workers to experience burnout if they could no longer manage the demands (Bakker & Demerouti, 2007; Bakker et al., 2004; Demerouti et al., 2001).

Job resources refer to the aspects of a job that are operative in achieving work goals, lowering job demands and motivating personal growth, learning and development (Demerouti et al., 2001). Jobs with high decision latitude tend to let workers to have the discretion and authority to make decision on how their work task can be carried out. High social support works given by supervisor and co-workers on the other hand could promote adaptive appraisal among the workers and this can increase their WE (Hockey, 1997; Putra, Cho & Liu, 2017).

Nevertheless, workers' feeling of being burnout like the experience of weariness, irritability, and exhaustion can be reduced if adequate JR were given to the workers (Bedarkar & Pandita, 2014; Schaufeli, 2017; Schaufeli & Taris, 2014). In other words, JR could moderate the relationship between JD and burnout (Smoktunowicz et al, 2015; Tadić, Bakker & Oerlemans, 2015). Figure 2.1 shows that theoretical framework of Job Demands-Resources Model.

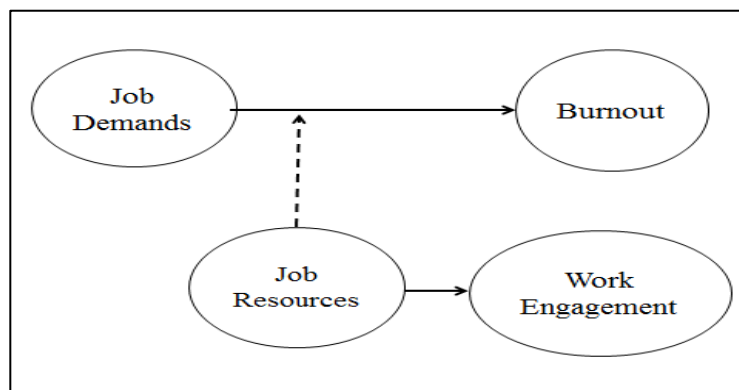


Figure 2.1: The Theoretical Framework of Job Demands-Resources Model
Source: Demerouti et al. (2001)

2.5 Social Exchange Theory

The theory is also one of the relatively prominent theoretical rationales that can interpret an organizational behaviour, such as WE (Cropanzano & Mitchell, 2005). The basic tenet of the theory is as follows; a person would trade his or her

behaviour actions in exchange for certain desired rewards (Blau, 1964; Homans, 1958; Thibaut & Kelly, 1959).

Social exchange theory was introduced by Homans (1958) and it took an individualistic approach (concepts of individualism to explain exchange processes). Homans (1958) emphasized reinforcement principles, in which individuals will perform certain behaviour based on their next social move, guided by past experiences. For example, when workers perceive that certain favourable rewards (tangible or intangible) would occur after performing an action, the workers will act accordingly in the current or future occasions. The term social exchange can be characterized as the exchange of activity, tangible (e.g. goods & money) or intangible (e.g. social amenities & friendship) between at least two persons (Homans, 1958; Lambe, Wittmann & Spekman, 2001). In brief, Homans (1958) had adopted a more reductionist approach, moving in the inverse direction.

Later, Thibaut and Kelly (1959) modified the theory from psychological perspective. Individuals endeavour to minimize costs and maximize rewards. For example, a person tends to build up a positive or negative relationship with other people based on the perceived possible outcomes (Thibault & Kelly, 1959). In other words, an individual would response or react based on the person's perception of outcome's values that could be gained, which differentiate rewards and costs (Thibault & Kelly, 1959). At the point when possible outcomes are perceived to be greater than related costs, a closer relationship with people will be developed (Thibault & Kelly, 1959).

However, Peter Blau disagreed with both of Homans (1958) and, Thibault and Kelley's (1959) approaches. He asserted that psychology distraction can confuse individuals to the important emergent aspects of social exchange (Emerson, 1976). Instead, Blau emphasized technical economic analysis (Emerson, 1976). Blau (1954) basically characterized social exchange by restricting to activities that are contingent and mutually rewarding process, including transactions or exchange (Emerson, 1976). Overall, the social situation labelled by Homans (1958), Thibaout and Kelly (1959), and Blau's (1964) approaches were largely reflecting casual social interaction among small groups people.

Social exchange theory has been recognized as a theoretical foundation to clarify diverse situation in business practices. A study carried out by Sak (2006) served as an example to explain the engagement behavior of employees in an organization. Sak (2006) proposed to use social exchange theory in the context of work setting, which explained how workers would engage in their job if corporate volunteerism is introduced in their company.

In CV literature, Albdour and Altarawneh (2012), Allen (2013), Ram and Prabakar (2011) and Slack et al. (2015) had used social exchange theory to study the perceived acquisition value and perceived work commitment value. In the context of this study, the acquisition value shows the positive feeling that can be derived as a result of social engagement or CV. For example, Albdour and Altarawneh (2012) and Allen (2013) studies showed that those employed service club participants and banking staff respondents who were involved in CV activities were more engaged in their work. This study therefore adopts the social

exchange theory (SET) that has been used in the corporate volunteerism literature and integrates the SET with JDR model.

2.5.1 Corporate Volunteerism

The concept of volunteerism as perceived by Malaysian was not significantly different from other societies (Chan, 2014). It started with individuals' commitment to religious (Chan, 2014). The conceptual idea of CV was originated in the United State, in the early 1900s (Cycyota et al., 2016). Corporate volunteerism views to be a part of a corporate social responsibilities framework (Basil, 2009). Later, the concept was adopted by organizations located in Europe and North America (Cycyota et al., 2016).

The social exchange theory proposes that if volunteering is significant to the worker, and if the employer encourages corporate volunteerism, then worker will contribute additional effort, such as higher levels of WE, in an attempt to strengthen the relationship (Allen, 2013). Glavas (2016) asserted that employee participation in volunteer programs can serve as a valid pathway to serve more customers. Moreover, a strong, statistically significant relationship had been found between corporate volunteerism and work engagement among workers aged 21-35 (Brammer, Millington & Rayton, 2007).

Based on the assumptions of social exchange theory and supports of past studies' result, corporate volunteerism therefore has the potential to increase work engagement level among employees (Allen, 2013). Figure 2.2 shows the relationship between corporate volunteerism and work engagement among

employees.

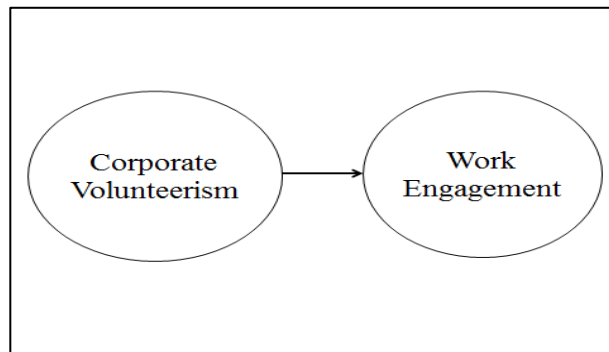


Figure 2.2: The Conceptual Framework on the Relationship between Corporate Volunteerism and Work Engagement
Source: Allen, (2013)

2.6 The Rationale for Integrating the JD-R model and Social Exchange Theory in Current Study

Many past empirical studies used JD-R model and SET as the basic theoretical framework to understand burnout and/or WE. The studies were focusing mainly on white collar workers such as such as teachers (Mojsa-Kaja, Golonka & Marek, 2015; Roslan, Ho, Ng & Sambasivan, 2015), engineers (Myhre, 2014), health professionals and mechanics (Portoghese, Galletta, Coppola, Finco & Campagna, 2014), principals (Van Droogenbroeck, Spruyt & Vanroelen, 2014) and interns (Akkerman, Schaufeli, Brenninkmeijer & Blonk, 2013).

The past studies' results however may not be able to generalise the blue collar workers' response towards JD, JR, CV, burnout and WE (De Spiegelaere, Van Gyes & Hootegem, 2012; Schaufeli & Taris, 2014). Therefore, the study among the blue collar workers needs to be carried out. This study thereby fills the literature gap by developing a rigorous conceptual framework that aims to examine how the constructs of both theories influence each others, in the context of courier dispatcher's perception.

The study result could provide useful reference to courier companies that aim to retain the dispatch workers and motivate them to be more engaged in work. In addition, a carefully created set of corporate volunteerism programme could create a win-win situation among various stakeholders (businesses, communities and policy makers) as a whole.

2.7 Overview the Development of JD-R model and Social Exchange Theory in Past Studies

In filling the research gap, it is useful to review how did past researchers developed their conceptual frameworks, using the JD-R model and social exchange theory as the basic theoretical framework.

2.7.1 Application of Job Demand-Resources Model in Past Empirical Studies

The review of the relevant JD-R model literature has indicated three key notions (see Table 2.1). First, the propositions explained in JD-R model has received many empirical supports across a wide range of occupations such as teachers (Mojsa-Kaja et al., 2015; Roslan et al., 2015), engineers (Myhre, 2014), health professionals and mechanics (Portoghese et al., 2014), principals (Van Droogenbroeck et al., 2014) and interns (Akkerman et al., 2013); and in many possible working sectors such as industrial work (Enshassi, El-Rayyes & Alkilani, 2015; Useche, Cendales, Alonso Plá & Serge, 2017), communication (Khan, Imran & Nisar, 2016; Tian et al, 2015) education (Akkerman et al., 2013; Barkhuizen, Rothmann & Van De Vijver, 2014; Guglielmi, Simbula, Schaufeli & Depolo, 2012) and health care (Portoghese et al., 2014; Maslach & Leiter, 2016).

In brief, JD-R model has been used to investigate a broad range of professions' response on JD, JR, burnout, and WE; including high skilled and low skilled service workers. To enrich the JD-R literature, this study has used the JD-R model to investigate how the constructs of JD and JR can influence blue collar worker's reaction towards burnout and WE.

Secondly, work characteristics (e.g. psychological and physical demands from employer, decision latitudes, supervisor support and co-worker support) as antecedents of burnout and WE have been frequently empirically tested in past studies. The role of work environment meanwhile was taken for granted in past studies. Corporate volunteerism can be considered as a work environment resource because the construct plays a more fundamental role in social interactions that can serve as an important indicator for WE.

Thirdly, many past empirical studies extended the JD-R model by treating burnout and/or WE as mediating variable and studied the mediating effect on new dependent variables: such as in-role and extra-role job performance (Bakker et al., 2004; Van den Broeck, Vansteenkiste, De Witte and Lens, 2008), health problem and turnover intention (Schaufeli & Bakker, 2004; Hakanen et al., 2005), determination to continue (Lewig, Xanthopoulou, Bakker, Dollard & Metzger, 2007) and fatigue at work (Kinnunen, Feldt, Siltaloppi & Sonnentag, 2011). In summary, integrating the two theories is still rarely done in literature. The current study's research model therefore can fill the literature gap.

Table 2.1: Summary of Past Studies' Research Models that used JD-R Model

Authors' name (year)	Research model's variables	Important implication of the modified JD-R model's results
Bakker et al. (2004)	<p>Independent variables</p> <ul style="list-style-type: none"> • Job demands • Job resources <p>Mediating variable</p> <ul style="list-style-type: none"> • Burnout (2 core dimensions: exhaustion & disengagement) <p>Dependent variables</p> <ul style="list-style-type: none"> • In-role performance • Extra-role performance 	<ul style="list-style-type: none"> • Job demands was the most important antecedents of in-role performance, through the experience of exhaustion. • Job resources was the most important predictors of extra-role performance through influence on disengagement. • Exhaustion had a positive relationship with disengagement. • The two core dimension of burnout: exhaustion & disengagement (at work) is not commonly been used in literature due to the instrument is applied to those workers who perform physical work and those whose job is mainly about processing information only.
Schaufeli and Bakker (2004)	<p>Independent variables</p> <ul style="list-style-type: none"> • Job demands • Job resources <p>Mediating variables</p> <ul style="list-style-type: none"> • Burnout • Work engagement <p>Dependent variables</p> <ul style="list-style-type: none"> • Health problem • Turnover intention 	<ul style="list-style-type: none"> • Burnout had statistical significantly mediating the relationships between: (1) job demands and health problems; and (2) job resources and turnover intention. • However, work engagement had only managed to mediate the effect of job resources on only one dependent variable: turnover intention. Probably this was because effect of job resources on work engagement becomes more salient and gains motivational potential when employees are confronted with high job demands and higher job resources can help to achieve the goal.
Hakanen et al. (2005)	<p>Independent variables</p> <ul style="list-style-type: none"> • Job demands • Job resources <p>Mediating variables</p> <ul style="list-style-type: none"> • Burnout • Work engagement <p>Dependent variables</p> <ul style="list-style-type: none"> • ill health • Organizational commitment 	<ul style="list-style-type: none"> • Burnout had mediated the effect of: (1) job demands on ill health and (2) job resources on work engagement • Work engagement had mediated the effects of job resources on organization's commitment. • The results showed that burnout and work engagement could function as mediating variables on top of serving as a dependent variable, as depicted in the original JD-R model.

Continue next page

Authors' name (year)	Research model's variables	Important implication of the modified JD-R model's results
Lewig et al. (2007)	<p>Independent variables</p> <ul style="list-style-type: none"> • Job demands • Job resources <p>Mediating variable</p> <ul style="list-style-type: none"> • Burnout • Connectedness <p>Dependent variables</p> <ul style="list-style-type: none"> • Health Problem • Determination to Continue 	<ul style="list-style-type: none"> • Burnout had mediated the effect generated by JD on health problem, and on determination to continue respectively. • Connectedness had mediated the relationship between JR and determination to continue. • Interestingly, burnout had mediated the JD and JR. • The confirmation of the connectedness' mediating effect can be used by future researcher to test its effect in the same or different study context.
Xanthopoulou et al. (2007)	<p>Independent variables</p> <ul style="list-style-type: none"> • Job demands • Job resources <p>Mediating/moderating variable</p> <ul style="list-style-type: none"> • Personal resource <p>Dependent variables</p> <ul style="list-style-type: none"> • Exhaustion • Work engagement 	<ul style="list-style-type: none"> • Personal resources had (1) moderated the relationship between JD and exhaustion, (2) mediated the relationship between JR and WE, and (3) explained how employees perceive their work environment and well-being. • The result concluded the role of personal resource had influenced personal characteristics and the perception of work environment.
Schaufeli et al. (2009)	<p>Independent Variables</p> <ul style="list-style-type: none"> • Job demands • Job resources <p>Mediating variables</p> <ul style="list-style-type: none"> • Burnout • Work engagement <p>Dependent variables</p> <ul style="list-style-type: none"> • Absence duration • Absence frequency 	<ul style="list-style-type: none"> • The results revealed that: <ul style="list-style-type: none"> (1) the increases in JD and the decreases of JR can cause burnout; (2) JR and WE were positively related; and (3) burnout and WE can influence the duration and frequency of 'involuntary' absence.
Hu et al. (2010)	<p>Independent & moderating variable</p> <ul style="list-style-type: none"> • Job demands • Job resources <p>Mediating variables</p> <ul style="list-style-type: none"> • Burnout • Work engagement 	<ul style="list-style-type: none"> • Burnout had mediated the relationship between JD and organizational outcome. • WE meanwhile had mediated the JR' effect on organizational outcomes. • In conclusion, burnout and WE can mediate the effects generated by JD and JR on different dependent variables or final outcomes of the study.

Continue next page

Authors' name (year)	Research model's variables	Important implication of the modified JD-R model's results
	<p>Dependent variable</p> <ul style="list-style-type: none"> Organizational Outcomes (Organizational commitment & turnover intention) 	
Guglielmi et al. (2012)	<p>Independent variable</p> <ul style="list-style-type: none"> Personal resources (2 core dimensions: self-efficacy & workaholism) <p>Mediating variables</p> <ul style="list-style-type: none"> Job demands Job resources <p>Dependent variables</p> <ul style="list-style-type: none"> Burnout Work engagement 	<ul style="list-style-type: none"> The results supported that sufficiency level of JR could encourage or discourage the respondents to apply their self-efficacy capability in their WE. Similarly, higher job demands would influence respondent's workaholism attitude which will in turn causing them to feel burnout. Majority of past studies that treated JD and JR as independent variables, this study however challenged that both variables could serve as mediators as well. In other words, both variables could serve as significant independent or mediating variables.
Roslan, Ho, Ng and Sambasivan (2014)	<p>Independent variables</p> <ul style="list-style-type: none"> Job Demands Job Resources <p>Mediating variable</p> <ul style="list-style-type: none"> Burnout <p>Dependent variables</p> <ul style="list-style-type: none"> Burnout Work engagement 	<ul style="list-style-type: none"> JD given to teachers and JR provided by the school were negatively related; JD and burnout were positively related; JR provided by the school and burnout among teachers were negatively related; JR provided by the school and teacher's WE were positively related; burnout mediated the relationship between JR and WE
Oshio et al. (2018)	<p>Independent variables</p> <ul style="list-style-type: none"> Job Demands Job Resources <p>Dependent variables</p> <ul style="list-style-type: none"> Psychological distress Work engagement 	<ul style="list-style-type: none"> WE was associated with JD and JR; WE had moderated the association between selected aspects of JD and JR and psychological distress.

2.7.2 Application of Social Exchange Theory in Past Empirical Studies

The contents of past empirical studies which were compiled in Table 2.2 can be summarized into two key notions. First, few empirical studies had surveyed the following respondents on the effect created by corporate volunteerism on work engagement: frontline bank staffs (Albdour & Altarawneh, 2012), volunteer service club professionals (Allen, 2013) from banking and third sectors such as associations, self-help groups and community groups. In brief, limited studies have been undertaken to test the effect of CV on WE among blue-collar workers.

Secondly, previous studies that used SET as the underpinning theory for their study's conceptual framework tend to focus on perceived organizational support, employee communication, reward and recognition, employee development, extend employee care, person-organization fit, distribution justice and procedural justice positively influence engagement (Abu Khalifeh & Som, 2013; Biswas & Bhatnagar, 2013; Biswas, Varma & Ramaswami, 2013; Ram & Prabakar, 2011). The effect that can be created by CV on WE, on the other hand tends to be less focused. This study therefore fills the literature gap.

Furthermore, the assessment of current studied respondents' (dispatch workers) reaction towards CV is also important for the following reason. Compared to the majority employees (those who born between 1980 and end of 1994) in workplace nowadays, the millennial workers are more enthusiastic to serve certain community because the generation tends to feel that their work and life will become more meaningful if they were involved in charity activity (Ferri-Reed, 2014). Empirical studies that can support Ferri-Reed's argument however

are limited. As majority of the courier industry's workforce are composed by millennial employees, the effect of corporate volunteerism therefore, should be empirically tested in this study.

Table 2.2: Summary of Past Studies' Research Models that used Social Exchange Theory (SET)

Authors' name (year)	Research model's variables	Important implication of the modified SET's results
Ram and Prabrakar (2011)	<p>Independent variables</p> <ul style="list-style-type: none"> Perceived organization support (6 core dimensions: job characteristic, intrinsic & extrinsic rewards, perceived supervisor support, perceived organizational support, perceptions of procedural justice and perceptions of distributive justice) <p>Mediating variable</p> <ul style="list-style-type: none"> Employee engagement <p>Four dependent variables</p> <ul style="list-style-type: none"> Job Satisfaction, job involvement, organizational citizenship behaviour, & intention to quit 	<ul style="list-style-type: none"> The study result confirmed that employees would be more engaged in work when the employers could provide sufficient tangible and non-tangible support and this will eventually increases their job satisfaction, job involvement and organization citizenship behavior; and decreases their intention to quit. The result has supported the SET's proposition: a person could be more engaged in doing something when they received favorable return.
Abu Khalifeh and Som (2013)	<p>Independent variable</p> <ul style="list-style-type: none"> Employee communication Reward & recognition Employee development Extend employee care <p>Dependent variable</p> <ul style="list-style-type: none"> Employee engagement 	<ul style="list-style-type: none"> The SET's proposition stands in various industries. For example, the respondents in food and beverage department agreed that all studied independent variables can affect their WE.
Albdour and Altarawneh (2012)	<p>Independent variable</p> <ul style="list-style-type: none"> Corporate Social Responsibility (CSR) <p>Dependent variable</p> <ul style="list-style-type: none"> Employee engagement 	<ul style="list-style-type: none"> Interestingly, involvement in meaningful event such as CSR also can affect workers' engagement as well (in this case study refers to banking staff in Jordan).
Allen (2013)	<p>Independent variable</p> <ul style="list-style-type: none"> Corporate volunteerism <p>Dependent variable</p> <ul style="list-style-type: none"> Work engagement 	<ul style="list-style-type: none"> Allen (2013) study had supported the previous studies shown above. Importantly, intangible or non-monetary benefits can affect a person's WE behavior. It's therefore worthwhile to hypothesize the validity of the result for lower ranking workers, like dispatch workers.

Continue next page

Authors' name (year)	Research model's variables	Important implication of the modified SET's results
Biswas and Bhatnagar (2013)	<p>Independent variables</p> <ul style="list-style-type: none"> Perceived Organizational Support (POS) Person-Organization Fit (P-O) <p>Dependent variable</p> <ul style="list-style-type: none"> Employee's engagement (measured by two core dimensions: organizational commitment & job satisfaction) 	<ul style="list-style-type: none"> Same as many past researchers, the authors had tested the direct effect of perceived supports that has or would be given by the studied organization on employee's WE. The authors extended the SET by testing the effect that can be generated by a factor that is not relevant to monetary and non-monetary benefits. The support of POS and engagement hypothesis fit the theory's proposition and consistent with many past studies' result. The support of P-O and engagement hypothesis fit the theory's proposition and consistent with many past studies' result.
Biswas et al. (2013)	<p>Independent variables</p> <ul style="list-style-type: none"> Distributive Justice Procedural Justice <p>Mediating variables</p> <ul style="list-style-type: none"> Perceived Organizational Support Psychological Contract <p>Dependent variable</p> <ul style="list-style-type: none"> Employee Engagement 	<ul style="list-style-type: none"> The hypotheses of the mediation effect had confirmed that both mediators had significantly affected the relationship between independent variables and employee engagement. In other words, future researchers could test the mediation relationship of justifiable variables.
Slack et al. (2015)	<p>Independent variables</p> <ul style="list-style-type: none"> Organization Corporate Social Responsibility <p>Dependent variables</p> <ul style="list-style-type: none"> Employee Engagement 	<ul style="list-style-type: none"> Involvement in meaningful event such as CSR also can affect workers' engagement as well (in this case study refers to Energy Companies staff in UK).
Huang et al. (2016)	<p>Independent variables</p> <ul style="list-style-type: none"> Employee safety climate perceptions <p>Mediating variables</p> <ul style="list-style-type: none"> Job Satisfaction <p>Dependent variables</p> <ul style="list-style-type: none"> Work Engagement Employee Turnover 	<ul style="list-style-type: none"> Employees' safety climate perceptions were linked to employees' level of job satisfaction, engagement, and objective turnover rate, thus supporting the application of social exchange theory. Job satisfaction was also a significant mediator between safety climate and the two human resource outcomes (i.e., employee engagement and turnover rate).

2.7.3 Past Studies' Operational Framework

Few studies have carried out robust research, in which the authors had furthered study in-depth of the dimensions that can be used to measure certain construct (see Table 2.3). For example, in testing the relationship between JD and the burnout's dimension constructs, or two of the four JD-R model's constructs, Bakker and Demerouti (2014) and Baka (2015) found that the two dimensions of JD: physical demands and psychological demands were not correlated. Therefore, assessing and reporting the individual effects of each dimension – physical demands and psychological demands – would assist the policy makers to plan more specific policies that can reduce the dispatch workers' burnout.

The decomposition of job demands into two dimensions: physical demands and psychological demands were supported by Bakker and Demerouti (2014) study result. The result showed that respondents were burnout as a result of the effect generated by psychological demands' items. The items that were used to measure the dimension of physical demands on the other hand had not significantly causing the respondents to feel burnout. Such indication supports that respondents with different characteristics may evaluate the direct effect of each dimension on job burnout differently. This message is important for future researchers – if the items of different dimensions are summed up to measure only one construct, the result could be different from those studies that had separated the items into different dimensions. This statement could be viable especially when the effect of one dimension can offset the conflicting effect created by another dimension.

Another critical finding can be observed. The following authors had tested only one of the job resources' dimensions and the result did support the moderating effect of JR on burnout (Roslan et al., 2015; Woodhead, Northrop & Edelstein, 2016). On the other hand, contradictory result was observed when past authors tested the effect of one dimension of job resources on WE. In other words, one dimension alone may be able to generate only very marginal effect on WE (Mustosmäki, Anttila & Oinas, 2013; Salminen, Mäkikangas & Feldt, 2014) or respondents may not be able to describe the effect of JR on their WE if only one dimension is tested.

Table 2.3: Summary of Development and Relationship of the JD-R Model's Individual Construct's Dimensions on Studied Dependent Variable

Author's name & year	Details of respondents	Research's finding
Testing the relationship between the dimensions of job demand (physical demands and psychological demands) and burnout		
Bakker et al. (2005)	A total of 1012 employees were selected from a higher education institution in Netherlands	Both dimensions did not statistically significant related to burnout
Xanthopoulou et al. (2007)	747 employees from two home care organizations in Netherlands had participated	Both dimensions did not significantly related to burnout
Nahrgang et al. (2010)	203 employees from construction, health care, manufacturing and transportation companies were involved	Only one dimension: psychological demands had significant relationship to burnout
Testing the relationship between the dimensions of job resources (decision latitude and social support) and burnout		
Bakker et al. (2006)	490 employees were selected from banks and insurance companies in Netherlands	Each dimensions was not correlated and not statistically significant with burnout
Maslach et al. (2014)	1190 Romanian health care professionals had participated	Only one of the dimension: decision latitude had influence burnout significantly
Woodhead et al. (2014)	250 nursing staffs were surveyed	Only one of the dimension: social support had influence burnout significantly
Roslan et al. (2015)	1300 teachers were employed in the study	Only one of the dimension: decision latitude had influence burnout significantly
Testing the relationship between the dimensions of job resources (decision latitude and social support) and work engagement		
Coetzer & Rothman (2007)	83 employees were selected from a South African's manufacturing industry	There was no significant relationship between social supports and WE
Bakker et al. (2010)	54 Dutch teachers	There was no significant relationship between social supports and WE
Mustosmäki et al. (2013)	435 employees and managers chosen from telecom companies in Finnish had involved	Social support was statistical weak related to WE

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Author's name & year	Details of respondents	Research's finding
Salminen et al. (2014)	747 Finnish young managers from Finnish National Labour Union (Engineering) had participated	Decision latitude was statistically weak related to WE
Strindberg (2016)	681 nurses had taken part in the survey	The relationship between decision latitude and WE was not statistically significant

Overall, it is strongly encouraged to study all the dimensions recommended by past researchers individually and test the relationship of each dimension and the related variable as different dimensions may produce different effect.

In developing the dimensions and measurement items for each dimensions, past researchers have been modified the original dimensions and items shown on Karasek's (1985) Job Content Questionnaire (JCQ) (Cheng, Luh, & Guo, 2003; Choi et al., 2008; Choobineh, Movahed, Tabatabaie & Kumashiro, 2009; De Araujo & Karasek, 2008; Edimansyah, Rusli, Naing & Mazalisah, 2006; Jabali et al., 2013; Li et al., 2013; Phakthongsuk, 2009; Yang & Chang, 2008) (see Table 2.4).

Table 2.4: List of Items that were used to Measure the Dimensions of Past Studies' Constructs

Name of construct	Dimension of the construct	Measurement items	
a) Burnout	a.1) Exhaustion	Drained ^{n, o, p, q, r}	
		Used up ^{n, o, p, q, r}	
		Tired ^{n, o, p, q, r}	
		a.2) Cynicism	Strain/pressured ^{n, o, p, q, r}
			Burned out/ exhausted ^{n, o, p, q,}
			Less interested ^{n, o, p, q}
			Less enthused ^{n, o, p, q}
		a.3) Professional efficacy	Not bothered ^{n, p, q,}
			Cynical ^{n, o, p, q, r}
Doubts ^{n, o, q, r}			
Effective ^{n, o, p, q}			
Contribution ^{n, o, p, q}			
b) Work Engagement	b.1) Vigor	Good at job ^{n, o, p, q, r}	
		Exhilarated ^{n, o, p, q, r}	
		Accomplish ^{n, o, p, q, r}	
		Confident ^{n, o, p, q}	
		Feel strong and vigorous ^{s, t, u, v, w,}	
		Feel like going to work ^{s, u, v, w,}	
		b.2) Dedication	Willing working ^{s, u, v, w,}
			Feel bursting ^{t, u, v, w,}
			Pulled/strong/tough ^{u, v, w,}
			Able to handle difficulties ^{s, t, u, v, w}
		b.3) Absorption	Appreciate ^{s, t, u, v, w}
			Exciting ^{s, u, v, w}
			Provide new idea ^{s, u, v, w}
			Feeling proud ^{s, t, u, v, w}
			Willing to take challenging task ^{s, t, u, v, w}
c) Job Demands	c.1) Psychological demands	Time flies ^{s, u, v, w}	
		Everything else ^{s, u, v, w}	
		Feel happy ^{s, t, u, v, w}	
		Immersed ^{s, t, u, v, w}	
		Detach ^{s, t, u, v, w}	
		Carried away ^{t, u, v, w}	
		Working very hard ^{a, b, c, d, e, f, g, h, i, j}	
		Not enough time ^{a, b, d, e, g, h, j}	
		Excessive amount of work ^{a, b, e, f, g, h, i, j}	
Work fast ^{a, b, c, d, e, g, h}			
Disagreement ^{a, c, d, e, g, h}			
Busy job ^{b, c, f, g, h, i, j}			
Perform another job ^{c, g, h, j}			

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Name of construct	Dimension of the construct	Measurement items
	c.2) Physical demands	Physical effort ^{f, h, j} Heavy workloads ^{f, h, j} Work for longer hours ^{f, j} Awkward position ^{f, j}
d) Job Resources	d.1) Decision latitudes: <ul style="list-style-type: none"> • Skill discretion • Decision authority 	Knowledge ^{a, b, c, d, e, f, g, j} Special abilities ^{a, b, c, d, e, f, g, i, j} Creative ^{a, b, c, d, e, f, g, i, j} Variety of things ^{a, b, c, d, e, f, g, i, j} Repetitive work ^{a, b, e, g} Affect ^h Freedom ^{a, b, c, d, e, f, g, h, i, j} Decision ^{a, b, c, d, e, f, g, i, j} Opinion ^{a, b, c, d, e, f, h, j}
	d.2) Social support: <ul style="list-style-type: none"> • Supervisor support • Co-worker support 	Attention ^{a, b, c, d, e, f, g, h, i, j} Helpful ^{a, b, c, d, e, f, g, h, i, j} Concerned ^{a, b, d, e, g, h} Good organizer ^{a, b, c, d, e, g, h} Work together ^{f, i, j} Sympathy Feelings ^j Standard ^{a, b, c, d, e, f, g, h, j} Activities ^{a, b, c, d, e, f, g, h, i, j} Friendly ^{a, b, d, e, f, g, h, i, j} Helpful ^{a, b, c, d, f, g, h, i, j} Absent of hostility or conflict feelings ^j Work together ^{e, j}
e) Corporate Volunteerism	e.1) Values	Less fortunate ^{k, l, m} Welfare concerned ^{k, l, m} Compassion ^{k, l, m} Important to help ^{k, l, m} Sense of willingness ^{k, l, m}
	e.2) Understanding	Learn more ^{k, l, m} Discover ^{k, l, m} Experience ^{k, l, m} Variety of people ^{k, l, m} Own strengths ^{k, l, m} Intention to find out more ^m

Source:

- ^a Cheng, Luh & Guo (2003)
^b Li, Yang, Liu, Xi & Cho (2004)
^c Edimansyah, Rusli, Naing & Mazalisah (2006)
^d Hadi, Naing, Daud & Nordin (2006)
^e Choi et al. (2008)
^f De Araujo (2008)
^g Choobineh, Movahead, Tabatabaie & Kumashiro (2010)
^h Phakthongsuk (2011)
ⁱ Jabali et al. (2013)
^j Li, Jiang, Yao & Li (2013)
^k Clary & Snyder (1999)
^l Gage III (2009)
^m Gage & Thapa (2012)
ⁿ Leiter & Schaufeli (1996)
^o Schutte, Toppinen, Kalimo & Schaufeli (2000)
^p Bresó, Salanovo & Schaufeli (2007)
^q Leiter, Jackson & Shaughnessy (2009)
^r Chirkowska-Smolak & Kleka (2011)
^s Karatepe & Olugbade (2009)
^t Karatepe (2013)
^u Ugwu (2013)
^v Panthee, Shimazu & Kawakami (2014)
^w Sulaiman & Zahoni (2016)

2.8 Relevant Past Studies' Research Methodology

In this sub-topic, current author reviewed past studies methodology that includes their study locations, target populations, and data collection approach. In this way, current author could provide justifiable reasons of why certain survey methods should be employed in this study. The topic also examines the similarities and differences of the research methodology adopted by past studies that were adopting or adapting the JD-R model and social exchange theory.

Many past studies had been carried out to survey employees working in western countries (Akkerman et al., 2013; Guglielmi et al., 2012; Kinnunen et al., 2011; Sulea et al., 2012); eastern countries (Abu Khalifeh & Som, 2013; Biswas & Bhatnagar, 2013; Biswas et al., 2013); and in middle east countries (Albdour & Altarawneh, 2012; Ram & Prabhakar, 2011).

A number of studies have used JD-R model and social exchange theory in explaining the effect of WE in different sectors, for example manufacturing (Hu et al., 2012; Sulea et al., 2012; Biswas et al., 2013; Biswas & Bhatnagar, 2013); communication (Kinnunen et al., 2011); education (Akkerman et al., 2013; Guglielmi et al., 2012; Kinnunen et al., 2011); health care (Portoghese et al., 2014; Maslach & Leiter, 2016); service (Biswas & Bhatnagar, 2013; Allen, 2013); banking (Albdour & Altarawneh, 2012); and hotel (Abu Khalifeh & Som, 2013). The compilation of studies displayed above show that relationship between burnout and WE among courier dispatch workers' is very limited. As the efficiency of the employees' work performance could be an important indicator of their company's future development, future research that focus on

the dispatch workers should be carried out.

Quantitative approach was commonly used (Abu Khalifeh & Som, 2013; Akkermans et al., 2013; Albdour & Altarawneh, 2012; Allen, 2013; Biswas & Bhatnagar, 2013; Biswas et al., 2013; Guglielmi et al., 2012; Hu et al., 2012; Kinnunen et al., 2011; Ram & Prabhakar, 2011; Sulea et al., 2012). Qualitative approach is useful when researchers need to find out more evidences that can help them to build up a new theory. This study does not intend to develop new dimensions or measurements items for any dimensions, therefore qualitative approach is not necessary.

This study's basic models: JD-R model and social exchange theory have been frequently tested by researchers on different composition of respondents in many different studied locations. Most of the studies' results supported the basic model's propositions or hypothetical relationships between the original constructs. Therefore, instead of developing new dimensions or measurement items, the current author has adopted the dimensions and measurement items that are appropriate for the context of this study's respondents and work environment. In other words, this study is a deductive research and thereby, quantitative approach is used to confirm current hypotheses.

Most past research questions were closed-ended questions and distributed by using drop-off and mail-back method (Abu Khalifeh & Som, 2013; Akkermans et al., 2013; Albdour & Altarawneh, 2012; Allen, 2013; Biswas et al., 2013; Biswas et al., 2013; Guglielmi et al., 2012; Kinnunen et al., 2011; Ram &

Prabhakar, 2011; Sulea et al., 2012). Mail-back method is not an appropriate questionnaire distribution method if the ratio of non-response among dispatch worker is expected to be high. To improve the drop-off and pick-up method that were commonly used in past studies, the questionnaire facilitators should be trained to aid in data collection. The facilitators should be informed about the purpose of study and maintained open-mindedness in obtaining information.

Sample sizes ranging from 210 to 1698 were conventionally used in past studies (Abu Khalifeh & Som, 2013; Akkermans et al., 2013; Albdour & Altarawneh, 2012; Allen, 2013; Biswas et al., 2013; Biswas et al., 2013; Guglielmi et al., 2012; Hu et al., 2012; Kinnunen et al., 2011; Ram & Prabhakar, 2011; Sulea et al., 2012). However, explanation on the determination of sample size was not discussed in most studies (Abu Khalifeh & Som, 2013; Akkermans et al., 2013; Albdour & Altarawneh, 2012; Allen, 2013; Biswas et al., 2013; Biswas et al., 2013; Guglielmi et al., 2012; Hu et al., 2012; Kinnunen et al., 2011; Ram & Prabhakar, 2011; Sulea et al., 2012). Researchers should disclose how their study's sample size was determined. This could enable the readers to justify whether the applied sample size could represent the population appropriately. This study, therefore will discuss in details on the determinant of sample size. The details are discussed in chapter three.

Different sampling techniques were used by past researchers in collecting cross-sectional data from the following sectors: (1) convenience and random sampling methods were employed to select respondents working in manufacturing sectors (Biswas & Bhatnagar, 2013; Biswas et al., 2013; Hu et al., 2012; Sulea et al.,

2012), (2) in service sector, random sampling methods was employed (Allen, 2013; Biswas & Bhatnagar, 2013), (3) in communication sector, convenience sampling method was used (Biswas & Bhatnagar, 2013; Kinnuren et al., 2011), (4) random and convenience sampling methods were most commonly adopted in education sector (Akkerman et al., 2013; Guglielmi et al., 2012; Kinnuren et al., 2011), (5) in health care sector, convenience and random sampling methods had been employed (Hu et al., 2010), (6) in banking sector, quota and convenience sampling method was used (Albdour & Altarawneh, 2012), and (7) convenience sampling method has been employed in hotel sector (Abu Khalifeh & Som, 2013).

Although probability sampling is ideal, such sampling method may not be applicable in the absent of sampling frame. Therefore, past researchers had used non-probability sampling method. If the population data of courier dispatch workers cannot be obtained from surveyed courier company, non-probability sampling therefore could be more suitably used in this study.

The surveyed courier company may be willing to provide the population list to current author, however the list may be out-dated very soon as the manpower turnover among dispatch workers is too frequent. Nevertheless, the current author tried to reduce biasness by using multi-stage sampling method. This can ensure the data to be collected from a wide range of geographically dispersed area (the details are discussed under sub-topic 3.3.1.1).

2.9 Relevant Past Studies' Data Analysis Methods

For studies that were using social exchange theory, multiple regression analysis had been adopted by many researchers for the purpose of understanding the impact of corporate volunteering on WE (Albdour & Altarawneh, 2012; Abu Khalifeh & Som, 2013; Allen, 2013). In running the analysis, controlled variables such as age of corporate volunteers, years of education of corporate volunteers, and perceived career development were taken into account (Abu Khalifeh & Som, 2013; Albdour & Altarawneh, 2012; Allen, 2013).

On the other hand, many past researchers had used structural equation modelling (SEM) to analyze their data and to confirm their research hypotheses (Abu Khalifeh and Som, 2013; Akkermans et al., 2013; Albdour & Altarawneh, 2012; Allen, 2013; Guglielmi et al., 2012; Hu et al., 2012; Kinnunen et al., 2011). The superiority of the SEM method is related to its ability to show the potential relationships between latent variables (such as JD, JR, CV, burnout, and WE) and observed variables (such as psychological demands, physical demands, decision latitude, supervisor support, co-worker support, value, understanding, exhaustion, cynicism, vigour, and dedication). To elaborate, latent constructs may not be able to be directly observable but are rather inferred from other variables that are observed (directly measured).

Furthermore, in SEM analysis, fit indices such as comparative fit index, normed fit index, non-normed fit index, incremental fit index, goodness-of-fit index, adjusted goodness-of-fit index and Root Mean Square Error of Approximation can be evaluated. The fit indices had been evaluated by many past researchers –

Akkermans et al., 2013; Bakker et al., 2004; Biswas and Bhatnage, 2013; Biswas et al., 2013 Guglielmi et al., 2012; Hu et al., 2012 and Kinnunen et al., 2011). In view of the benefits that can be produce by SEM analysis, this study is employing the same data analysis method.

2.10 Summary of Literature Review

Although the revised concepts of JD-R model had been applied in a wide range of occupations and in many working sectors, most past studies were studying white collar workers and survey on blue collar workers was limited. To fill the literature gap, this study is studying blue-collar workers, courier dispatch workers. Despite of their low designation status in courier companies, their work behaviours could determine the efficiency of the company's delivery speed.

JD-R model was developed to explain the effect of work characteristics (such as physical & psychological demands required from job, decision latitude, supervisor support and co-worker support) on burnout and WE. The effect that could be created by work environment such as the activation of CV programs on the other hand has been overlooked by past researchers. To enrich the burnout and WE literature, this study integrates the conceptualization of both JD-R model and social exchange theory.

In developing questionnaire, many past researchers had modified the measurement items' statements so that the studied respondents could understand and comprehend the measured items better. The current author was adopting the same approach because the courier dispatch worker respondents may not understand the common jargon or terminology of certain work characteristics or

work environment.

To ensure the validity and reliability of collected data, just like many recent researchers, SEM data analysis method was employed in this study. Many past researchers distributed their questionnaire by using drop-off and mail-back method. The methods may not be suitably used to survey courier dispatch workers as the non-response rate could be very high. To increase the response rate and accuracy, face-to-face questionnaire distribution method and facilitated by a trained distributor were recommended for this study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

Deductive research approach was used to construct current research model while quantitative method was used to generate quantitative results that could confirm current hypotheses and, the validity and reliability of the collected data.

3.2 The Proposed Current Research Model

Compared to Job Demand Control (JDC), Job Demand Control Support (JDSC) and Effort Reward Imbalance (ERI) that was established before the JD-R model, the latter model was recommended if researchers planned to study worker's well-being, WE and burnout (Bakker et al., 2014). Most of the past studies that adapted JD-R model had been focusing on measuring the effects of work characteristics (such as psychological and physical demands from employer, decision latitudes, supervisor support, and co-worker support) on burnout and WE. The important role that can be played by work environment meanwhile was rarely tested.

As described lengthily in previous chapters, CV, a component of work environment could serve an indicator to blue-collar worker's burnout and WE. Therefore, this study integrated the JD-R model (that measures the effects of JD and JR on burnout and WE) with social exchange theory (SET) (that estimates the effect of CV on WE) (see figure 3.1).

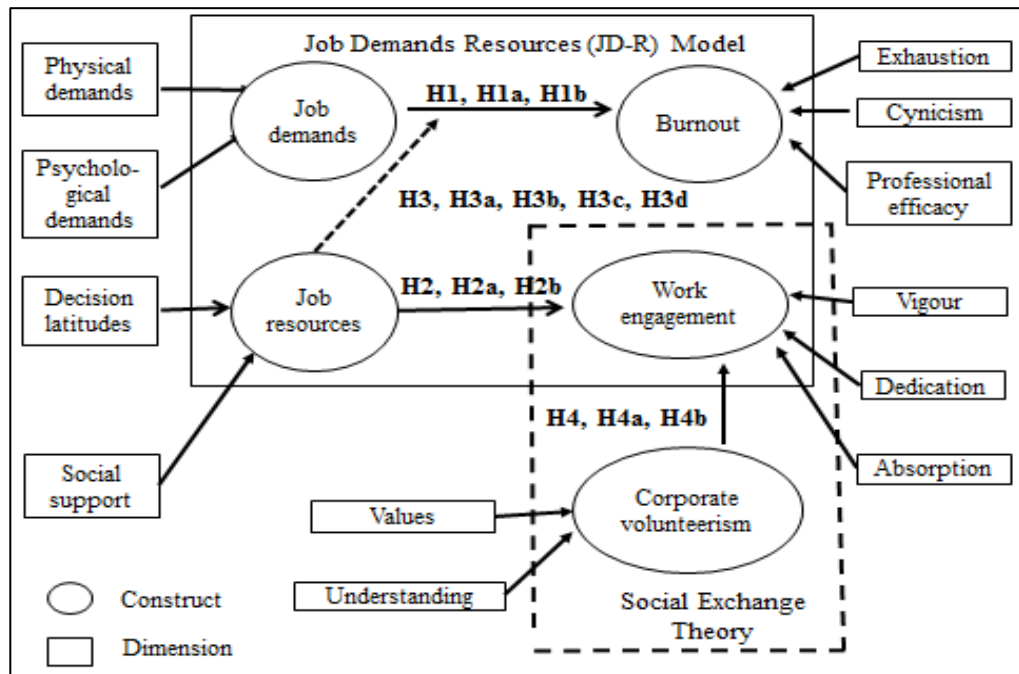


Figure 3.1: Proposed Research Model

According to SET, the exchange ideology subjected to volunteering is a dispositional orientation (Lee, Chaudhry & Tekleab, 2014). Workers who favor the enthusiastic exchange ideology have higher tendency to increase work output (Cureton, 2014). Worker's perceptions on volunteering programmes were very impressionistic, generally fulfilled with exchange for several rationales. Some workers may perceive that the implementation of corporate volunteerism activities was an elective investment taken by the working company to show the organization's care for employees and community (Glavas & Kelley, 2014).

By participating in the company's CV activities, the workers may have the chance to develop personal skills (Glavas & Kelley, 2014) and enlarge their social network. The positive reciprocation between employer and workers may motivate workers to enhance their WE behavior (Glavas & Kelley, 2014).

Although Glavas and Kelley's (2014) proposition sounds rationale, blue and white collar workers may react differently towards the dimensions of corporate

volunteerism: values and understanding (De Spiegelaere et al., 2012). The effects generated by the CV's dimensions on blue workers' work engagement may be different than white collar workers (Locke, 1973; Radley & Kennedy, 1992). Therefore, more studies need to be carried out to confirm Locke (1973), and Radley and Kennedy's (1992) propositions.

In addition, the examination of the effects caused by JD, JR and CV on WE and burnout simultaneously could further enrich the social exchange literature and could answer the following questions: how did the JDR model's constructs (JD and JR) and CV have influenced the dispatch workers' reaction towards burnout and WE?

Finally, the interpretation and implication of this study's result could help managerial decision makers to realize the interrelationship between the studied constructs so that a more holistic planning can be strategized for the benefit of employer and workers.

3.2.1 The Development of Current Research's Hypotheses

The hypotheses of current study were developed based on the research questions and research objectives. To evaluate the intensity of the direct effect created by JD on burnout (first research objective), two sub-hypotheses were developed as the construct of JD is made up by two dimensions. In assessing the direct effect of JR on WE (reflected in the second research objective), the second hypothesis was decomposed into two sub-hypotheses to map the two dimensions of JR.

Similarly, third research objective that aimed to measure the moderating effect of JR on the relationship between job demands and burnout, another two sub hypotheses were developed. Finally, in appraising the direct effect of CV on dispatch workers' WE, the fourth hypothesis was decomposed into another two sub-hypotheses as two dimensions were used to measure the construct of CV. The details of the development of each hypothesis are further discussed in the following sub-chapters.

3.2.1.1 The relationship between job demands and job burnout (H1)

Job demands showed the degree of continual contribution of physical and/or psychological effort or skills that the respondents are expected to perform in order to complete their work tasks (Demerouti et al., 2001). When JD exceeded certain level, the workers would begin to experience greater burnout such as feeling exhausted, cynicism, and therefore their job efficacies diminished (Demerouti et al., 2001). In other words, JD and burnout was positively related.

The JD-R model explained that excessive JD can fatigue employees' physical and psychological resources which will eventually lead to burnout (Hackman, 1980). Many JD-R studies of the following sectors had supported the JD-R's proposition; JD have positive relationship with burnout – manufacturing (De Beer, Tims & Bakker, 2016; Hu et al., 2012; Sulea et al., 2012), communication (Kinnuren et al., 2011; Naseem, 2018), education (Akkerman et al., 2013; Guglielmi et al., 2012; Kinnuren et al., 2011) and health care (Hu et al., 2012; Kumar, 2016).

However, some studies' result showed that two dimensions of JD (physical demands and psychological demands) had low significant effect or weak relationship with burnout (De Beer et al, 2016; Maslach & Leiter, 2016). Those studies were surveying white collar employees who were working in education institution, construction, health care, manufacturing and transportation industries, and home care organizations in Netherlands. Probably, this is because the surveyed companies were equipped with technology advanced equipment that required less physical contribution from workers.

During the dispatching process, dispatch worker was required to perform many manual tasks such as assigning workers (driver) and vehicles to pick-up or to deliver mail items from or to clients, developing delivery routes throughout the day, monitoring any sudden route change, and to establish alternative route for timely deliveries.

Assigning too much JD on workers, such as working for longer hours, could possibly causing the workers to feel burnout (Naseem, 2018). Therefore, the current author predicted that excessive JD and its dimensions (physical demands and psychological demands) will increase the dispatch workers' feeling of being burnout.

H1: Job demands positively relate to job burnout.

H1a: Physical demands positively relate to job burnout.

H1b: Psychological demands positively relate to job burnout.

3.2.1.2 The relationship between job resources and work engagement (H2)

The JD-R model explained that JR is a motivational tool that can increase WE (Caplan et al., 1975; Putra, Cho & Liu, 2017). Job resources such as decision latitude, supervisor support, co-worker support, role of clarity, and task significance could lower the negative effect created by excessive JD; and motivate personal growth, learning and development (Demerouti et al., 2001).

Workplace which proffered plentiful resources may promote the readiness of workers to commit their attempts and capacity to the job given (Putra, Cho & Liu, 2017). In the matter of compassionate teammate and work criticism, it may boost the possibility to stay outstanding in accomplishing one's work target (Chen & Chen, 2014). In short, JR played a vital role in promoting WE (Chen & Chen, 2014).

The basic inspirational capacity of JRs opined that each job has a definite inspirational capacity that relied upon the existence of job characteristics, such as supervisor support, co-worker support and decision latitude (Nakagawa et al, 2014). These job characteristics were related with absolute consequences like WE (Huynh, Xanthopoulou & Winefield, 2014). Boxall and Macky (2014) suggested that humans have high tendency to acquire, maintain and shield stuffs they favour. People who do not have opportunity to approach to substantial resource accumulation are more likely to undergo multiplied resource loss or vice versa.

Dispatch worker was account for all pieces on the delivering reports and notifies the supervisor if any delivery item is missing. The dispatch worker therefore should be flexible for additional working hours, changing shift times and changing locations. This job required the individual to work well with team and achieve joint goals. If sufficient resources were allocated to dispatcher workers to complete their jobs, their tendency to engage in work is therefore expected to increase.

Many of the past JD-R studies supported the significant positive relationship between each of JR' dimensions – (1) decision latitude, which can be break into two components: skill discretion and decision authority; and (2) social support from supervisory and co-worker – and WE. The theory's proposition had been supported by surveys on employees from various occupational fields: manufacturing (De Beer et al., 2016; Hu et al., 2012; Sulea et al., 2012), communication (Kinnuren et al., 2011; Naseem, 2018), education (Akkerman et al., 2013; Guglielmi et al., 2012; Kinnuren et al., 2011) and health care (Hu et al., 2012; Kumar, 2016). Based on this literature, courier dispatch workers were expected to stay engage in their work if sufficient job resources are allocated, or:

H2: Job resources positively relate to work engagement.

H2a: Decision latitudes positively relate to work engagement.

H2b: Social supports positively relate to work engagement.

3.2.1.3 The relationship of job resources between job demands and job burnout (H3)

The JD-R model also proposed that JR can moderate the effect of JD on burnout (Tadić et al., 2015). For example, in a quarrel with manager, support given by

one's workmate will promptly be helpful. Job resources had played a significant moderating role among respondents worked in the following companies: electrical engineering and electronic companies in The Netherlands (Xanthopoulou et al., 2007), telecom companies in The Netherlands (Schaufeli et al., 2009); and mechanical factories located in China (Hu et al., 2010).

To ensure the courier goods can be delivered to recipient on time, each dispatch worker needed to have the necessary cognitive, affective and psychomotor capabilities (related to the dimension of decision latitudes: skill discretion). On top of that, freedom given by employers to perform certain job, or to express opinions, or to make certain decisions (extended measurement items that could represent the decision latitudes dimensions) could moderate the effect of JD and burnout too.

As too many courier items needed to be delivered as fast as possible, another dimension of JR, social support received from supervisor and co-workers is important as well. Therefore, the current author predicted the following hypotheses:

H3: Job resources of employees will moderate the effect between job demands and job burnout.

H3a: Decision latitudes will moderate the relationship between physical demands and job burnout.

H3b: Social support will moderate the relationship between physical demands and job burnout.

H3c: Decision latitudes will moderate the relationship between

psychological demands and job burnout.

H3d: Social support will moderate the relationship between psychological demands and job burnout.

3.2.1.4 The relationship between corporate volunteerism and work engagement (H4)

In SET, worker's participation in CV activities or events could encourage the workers to be more vigour, dedicated and absorbed in their work (Allen, 2013). It was predicted that workers who value and understand the motive of CV activities will reciprocate positively towards their WE (Allen, 2013; Gage & Thapa, 2012).

The theory's proposition has been supported by many past studies that surveyed respondents from the following industries: manufacturing (Biswas et al., 2013; Biswas & Bhatnagar, 2013), service (Biswas & Bhatnagar, 2013; Allen, 2013), banking (Albdour & Altarawneh, 2012), and hotel (Abu Khalifeh & Som, 2013). Although the theory has been applied in various past studies, very limited study have analyzed the impact of corporate volunteerism on work engagement among courier workers (blue collar workers).

In line with the SET's proposition, dispatch workers who could understand and appreciate the values of any corporate volunteerism activity implemented or supported by their employer is expected to be more willing to be more engage in their work. Therefore, the following hypotheses were proposed:

H4: Corporate volunteerism positively relates to work engagement.

H4a: Dispatch workers who valued the corporate volunteerism undertaken by their employers will positively relate to their work engagement.

H4b: Dispatch workers who understand the motive of corporate volunteerism undertaken by their employers will positively relate to their work engagement.

3.2.2 Operation Framework of Current Research

The Maslach Burnout Inventory-General Survey (MBI-GS) was frequently used in past studies to measure the construct of burnout (Bria, Spânu, Băban & Dumitraşcu, 2014). MBI-GS was adopted in this study as well. In measuring the construct of burnout, the 16 items highlighted in MBI-GS were grouped into three dimensions: exhaustion (5 items), cynicism (5 items) and professional efficacy (6 items).

The construct of work engagement was measured by using Utrecht Work Engagement Scale (UWES) that was made up by 17 items. In this study, the items were grouped into three dimensions: vigour (6 items), dedication (5 items) and absorption (6 items). To measure the construct of job demands and job resources, Job Content Questionnaire (JCQ; Karasek et al., 1998) approach was adopted. Job demands consists of two dimensions: psychological demands (9 items) and physical demands (4 items).

Job resources meanwhile is composed by two dimensions: decision latitudes (which was made up by two sub-dimensions, skill discretion and decision authority); and social support (which was made up by two sub-dimensions as

well – support received from supervisory and co-worker) (see Table 3.1 for the items that were used to measure each sub-dimensions). All items that were used to measure the construct of JR in this study were adopted from studies carried out by Jabali, et al., (2013) and Li et al., (2013).

The items used to measure the CV construct of current study were adapted from Volunteer Functions Inventory (VFI) (Clary & Snyder, 1999). The items were grouped into two dimensions: understanding (6 items) and values (5 items) (Gage III & Thapa, 2012). Table 3.1 shows in details of the items used to measure the dimensions of each studied constructs.

Table 3.1: List of Items that were used to Measure the Dimensions of Current Studied Constructs

Name of construct	Dimension of the construct	Measurement items
a) Burnout	a.1) Exhaustion	Drained ^{a,b,c,d,e}
		Used up ^{a,b,c,d,e}
		Tired ^{a,b,c,d,e}
	a.2) Cynicism	Strain/pressured ^{a,b,c,d,e}
		Burned out/exhausted ^{a,b,c,d}
		Less interested ^{a,b,c,d,e}
		Less enthused ^{a,b,c,d,e}
		Not bothered ^{a,c,d}
		Cynical ^{a,b,c,d,e}
a.3) Professional efficacy	Doubts ^{a,b,d,e}	
	Effective ^{a,b,c,d}	
	Contribution ^{a,b,c,d}	
	Good at job ^{a,b,c,d,e}	
	Exhilarated ^{a,b,c,d,e}	
	Accomplish ^{a,b,c,d}	
b) Work Engagement	b.1) Vigour	Confident ^{a,b,c,d,e}
		Feel strong and vigorous ^{f,g,h,i,j}
		Feel like going to work ^{f,h,i,j}
		Working for longer hours ^{f,h,i,j}
		Feel bursting ^{g,h,i,j}
		Pulled/strong/tough ^{h,i,j}
	b.2) Dedication	Able to handle difficulties ^{f,g,h,i,j}
		Appreciate ^{f,g,h,i,j}
		Exciting ^{f,h,i,j}
	b.3) Absorption	Provide new idea ^{f,h,i,j}
		Feeling proud ^{f,g,h,i,j}
		Willing to take challenging task ^{f,h,i,j}
		Time flies ^{f,h,i,j}
		Everything else ^{f,h,i,j}
		Feel happy ^{f,g,h,i,j}
c) Job Demands	c.1) Psychological demands	Immersed ^{f,h,i,j}
		Detach ^{f,g,h,i,j}
		Carried away ^{f,h,i,j}
		Working very hard ^{k,l,m,n,o,p,q,r,s,t}
		Not enough time ^{k,l,n,o,q,r,t}
		Excessive amount of time ^{k,l,o,p,q,r,s,t}
		Work fast ^{k,l,m,n,o,q,r}
		Disagreement ^{k,m,n,o,q,r}
		Busy job ^{l,m,p,q,r,s,t}
Perform another job ^{m,q,r,t}		
Waiting on work ^{m,q,r,t}		

Continue next page

Name of construct	Dimension of the construct	Measurement items
	c.2) Physical demands	Physical effort ^{p,r,t} Heavy workloads ^{p,r,t} Work for longer hours ^{p,t} Awkward position ^{p,t}
d) Job Resources	d.1) Decision latitudes: <ul style="list-style-type: none"> • Skill discretion • Decision authority 	Knowledge ^{k,l,m,n,o,p,q,r,t} Special abilities ^{k,l,m,n,o,p,q,r,s,t} Creative ^{k,l,m,n,o,p,q,r,s,t} Variety of things ^{k,l,m,n,o,p,q,r,s,t} Repetitive work ^{k,l,o,q} Affect ^r Freedom ^{k,l,m,n,o,p,q,r,t} Decision ^{k,l,m,n,o,p,q,s,t} Opinion ^{k,l,m,n,o,p,r,t}
	d.2) Social support: <ul style="list-style-type: none"> • Supervisor support • Co-worker support 	Attention ^{k,l,m,n,o,p,q,r,s,t} Helpful ^{k,l,m,n,o,p,q,s,t} Concerned ^{k,l,n,o,q,r,p,s,t} Good organizer ^{k,l,m,n,o,r} Work together ^{p,s,t} Sympathy feeling ^t Standard ^{k,l,m,n,o,p,q,r,t} Activities ^{k,l,m,n,o,p,q,r,s,t} Friendly ^{k,l,n,o,p,q,r,s,t} Helpful ^{k,l,m,n,p,q,r,s,t} Absent of hostility or conflict feeling ^t Work together ^{o,t}
e) Corporate Volunteerism	e.1) Values	Less fortunate ^{u,v,w} Welfare concerned ^{u,v,w} Compassion ^{u,v,w} Important to help ^{u,v,w} Sense of willingness ^{u,v,w}
	e.2) Understanding	Learn more ^{u,v,w} Discover ^{u,v,w} Experience ^{u,v,w} Variety of people ^{u,v,w} Own strengths ^{u,v,w} Intention to find out more ^w

Source: ^a Leiter & Schaufeli (1996) ^m Edimansyah et al. (2006)
^b Schutte et al. (2000) ⁿ Hadi et al. (2006)
^c Bresó et al. (2007) ^o Choi et al. (2008)
^d Schaufeli et al. (2009) ^p De Araujo (2008)
^e Chirkowska-Smolak & Kleka (2011) ^q Choobineh et al. (2010)
^f Karatepe & Olugbade (2009) ^r Phakthongsuk (2011)
^g Karatepe (2013) ^s Jabali et al. (2013)
^h Ugwu (2013) ^t Li et al. (2013)
ⁱ Panthee et al. (2014) ^u Clary & Snyder (1999)
^j Sulaiman et al. (2016) ^v Gage III (2009)
^k Cheng et al. (2003) ^w Gage & Thapa (2012)
^l Li et al. (2004)

3.3 Definition of Current Study's Target Population

Dispatch workers refer to people whom are employed to work in the warehouse of the company. Basically, their job tasks include sorting routes, monitoring courier performance and enforcing the established delivery protocol. Specific job functions were assigned to the dispatch workers whom were designated with specific job position level (operational, executive, managing and others). For example, operational level dispatch workers were responsible to deliver and receive the courier parcels to and from specific shipment loading port. The executive level dispatch workers meanwhile were responsible to develop, alter, and optimize the routes for courier parcel delivery or collection by using modern routine software. In the meantime, the managing and others level dispatch workers must remain agile and ready to handle sudden route changes or issues arise during the delivery and/or collection process.

Dispatch workers from all level of job designations in the dispatch division were chosen in this study because their job functions were related to each other in ensuring speed collection and delivery of courier parcels. In other words, a dispatch worker may experience burnout and/or adjust his or her WE as a result of works performed by others. To obtain a more meaningful result that can contribute useful indications to the management team of the courier organization, this study therefore involve all the workers in the dispatch division irrespective of their job designation level.

In this study, irrespective of the dispatch workers' age, gender, and other demographic profiles, the respondents must have worked in the present or

previous courier company for at least one year. This is because the selected dispatch worker respondents should have a basic understanding of the basic level of JD, JR, burnout, and WE that were usually experienced by most dispatchers in Malaysia. In this way, they can differentiate whether their burnout or WE were influenced by JD, JR and CV in current courier company.

3.4 Current Study's Research Design

Quantitative approach was appropriate when large data needed to be summarized and similar research scope including the measurement of constructs' items have been repeatedly done by past researchers (Nardi, 2018). Current study's questionnaire was carefully designed to enhance the data's validity. Appropriate sample size as well as data collection and analysis methods were discussed in the following sub-chapters.

3.4.1 Data Elicitation of Current Study

Structured questionnaire was prepared and distributed by using face-to-face method. Multi-stage sampling method was employed so that the selected dispatch worker respondents could represent the population more accurately. Facilitators were trained to facilitate respondents who need further clarification while answering the questionnaire. The sample size of this study was determined by using Fisher's (1998) formulation.

3.4.1.1 Survey location and sampling design

As the work operations and procedures performed in specific courier organization and its branches or aliases company is standardized according to the guideline provided by Courier Industry Development Plan (that was

introduced by MCMC since 2012), only the courier organizations located in one representative district located in the Selangor state and one municipal council located in the selected district were selected for survey. The following elaborate the multi-stage sampling method that was used to select the survey locations.

According to MCMC (2017), Selangor is the state in Malaysia that has recorded the highest number of courier service branches, 74 branches compare to other 13 states in Malaysia. The statistical information pertaining to the total branches of a courier service organization in Selangor can be viewed from 1H 2017 Postal and Courier Services: Infographic. (<https://www.mcmc.gov.my/skmmgovmy/media/General/pdf/P-C-infographic-1H17.pdf>)

First, only one administrative district was randomly selected from the nine administrative districts in Selangor state using the Excel RAND function by the dispatch workers. The selected administrative district was Petaling District. Moreover, the Petaling District has the most number of new job registrants as well as active job registrants and courier establishments in 2017 (*Jobs Malaysia*, 2018; MCMC, 2017). Next, one local municipal council Petaling Jaya was also randomly selected using the Excel RAND function from the three local municipal councils in Petaling District, and Petaling Jaya Municipal Council.

Letter of requisition to conduct survey were sent to the courier companies located in selected district and municipal council. Staff from the human resources department of the companies that agreed to participate in this survey had assisted

the author in selecting and arranging the dispatch workers for the survey in the company.

3.4.1.2 Determination of sample size

Current study's sample size was computed by using the following Fisher's (1998) formulation due to the absent of population size.

$$n = (z^2pq)/d^2 \quad (1)$$

where n was the desired sample size population <10,000, z was the standard normal deviate (confidence level), p was the proportion in the target population to have a specific characteristic, q was 1-p and d was absolute precision (Singh & Masuku, 2014). Confidence level of 95% was selected because it causes the most desirable type of trade-off between the accuracy of the produced results and the available research budget.

According to MCMC (2017), Selangor recorded the highest number of courier service branches, 74 branches (22%) compare to other states. How many workers do a firm have to hire is often linked to the number of established branch. Preliminary study that involved a short-interview with few courier service operators has found that the number of courier service branches operating at Petaling Jaya is about 35 percent out of the total courier branches operating in Selangor. Thereby, this dissertation assumed p equals to 0.35 and q equals to 0.65. Hence, the desired sample size was 350 dispatch workers ($1.96^2 \times 0.35 \times 0.65 / 0.05^2$).

3.4.1.3 Distribution of questionnaire

The questionnaires were distributed to the following courier companies: ABX Express (M) Sdn Bhd, Airpak Express (M) Sdn Bhd, Aramex Malaysia Sdn Bhd, GD Express Sdn Bhd, Skynet Worldwide (M) Sdn Bhd, Sure-Reach Worldwide Express Sdn Bhd and TNT Express Worldwide (M) Sdn Bhd. To access the courier companies and collect data from dispatch workers, the following procedures were undertaken.

A requisition letter for the intention to carry out a survey among the dispatching employees was sent to targeted courier companies' human resource department for consideration. Most of the contacted companies had responded within two to three weeks. For those companies that failed to reply after the second week, a gentle reminder through email was delivered and followed up by second reminder in the third week.

Once the current author received favorable reply from the companies, an appointment was made to meet the in-charged person to discuss when and where the survey can be carried out. During the data collection session, three facilitators were assigned in each courier company to assist the dispatch worker respondents in answering the questionnaire. The survey was carried out by approaching the respondents whom was selected by the company while the dispatch workers were waiting for their daily morning briefing.

3.4.1.4 The design of questionnaire

A cover letter to notify the respondents of the purpose of the survey and to assure respondents that their response will be kept strictly confidential was attached

with the questionnaire. The questionnaire consisted two sections. Section A was meant to survey the dispatch workers' response on each item that is used to measure the respective dimension of each studied construct. Respondents were requested to provide their demographic profile in Section B (questionnaire of current study is attached on Appendix A).

Closed-ended questionnaire was used to collect quantitative data for statistical analyses (Christensen, Johnson, & Turner, 2014) and to confirm the hypotheses. Likert scale was employed in this study because the orderly structure of codification would enable the respondent to read and complete the survey more easily and the scale is a measurement tool that has been frequently applied to assess respondents' attitudes, values and opinions (Willits, Theodori & Luloff, 2016).

Four-point Likert scale was used in current questionnaire to reduce the chance for respondents of giving indecisive response. According to Worcester and Burns (1975), even number of Likert scale points or without midpoint may lessen the social desirability bias and furthermore the scales do not disrupt the actual meaning of thought held by respondents. The four-point Likert scales was coded from 1 (strongly disagree) to 4 (strongly agree) for each item that represents the measurement for the dimensions of JD, JR and CV. To measure the items of WE and burnout's dimensions, four-point Likert scales: ranged from 1 (never) to 4 (always) was used.

Bahasa Malaysia, the national language in Malaysia was used as the main language on the questionnaire's statement, supported by English language. Although English-language is the leading language of most sectors (Leung, Davison & Mohan, 2014), it was also called for rethinking the varying degrees of literacy levels among blue-collar employees. Besides that, majority of the respondents were Malays.

Back translation was used to ensure agreement of a correct version of a text. These translations were carried out with the help from two trained university lecturers of General Studies Department and one outstanding-awarded teacher (Guru Cemerlang) of secondary school that were well-versed in both Bahasa Melayu and English. In order to keep the originality and authenticity of the translations, the three translators who worked independently and unknown to each other were selected. After that, discussion resulted in corrections made to resolve differences in terms of vocabulary and meanings of the statement.

3.4.1.5 Pre-test the questionnaire

Pre-testing was necessary to ensure the questionnaire's statement of each item was as clear as possible to the dispatch workers. The pre-testing survey was carried out from the same zone as the main study. The respondents of dispatch workers were selected by using convenience sampling method.

One of the main advantages of pre-test survey was to enable respondents to explain their reaction of the questionnaire instruction, items, format, wording and any existing ambiguities. Then, the respondents were encouraged to suggest

ways to improve the questionnaire. The feedback received from the respondent was analyzed and incorporated into the modified questionnaire which was given to another group of respondents for pilot study.

A pre-test survey was administered by selecting 35 dispatch workers randomly; five respondents were randomly selected from each of the targeted courier service companies to respond to the questionnaire. Respondents were required to fill in the questionnaire and provide their feedback on the questionnaire instructions, items, format, wording and any existing ambiguities. Minor problems were pinpointed by respondents in understanding some of the words in the questionnaire. In order to solve the minor problems, facilitators were trained on how to explain the meaning of the highlighted words to the respondents during the data collection.

3.4.1.6 Pilot study

Pilot study was also referred to as feasibility research. The advantage of conducting a pilot study was to examine the feasibility of an approach that was intended to be used in a larger scale of study (Bryman, 2017). One hundred sets of questionnaires were distributed randomly to the employees in a courier service organization, which was located at the same zone as the main study and was facilitated by three facilitators.

Meyer (2016) suggested using at least 100 subjects in estimating a parameter. All the distributed questionnaires were collected from participants and the data were examined by using version 16.0 of Statistical Package for Social Science

(SPSS). Data screening result showed no missing values or the respondents had completed the questionnaire fully.

The purpose of the pilot test was to eliminate potential weaknesses or mistakes in the first draft of the questionnaire (Bryman, 2017). It was essential to ensure the reliability of the instrument prior to the actual study (Bryman, 2017). As such, based on reliability test in the pilot study, items that had resulted to the low Cronbach's alpha value were excluded in the actual study (Bryman, 2017). Table 3.2 shows that the coefficients of reliability, Cronbach's alpha for the following dimensions – exhaustion, cynicism, professional efficacy, vigour, dedication, absorption, psychological demands, physical demands, skill discretion, decision authority, supervisor support, co-worker support, values and understanding – were ranged from 0.71 to 0.91. This indicate that the respondents had answered all the items that were used to measure the respective construct at a consistent pattern, or did not display any abnormal respond toward any of the items that were used to measure its respective construct (Churchill, 1979; Flynn, Schroeder & Sakakibara, 1994; Hair, Bush & Ortinau, 2003).

However, the pilot study results showed that certain items of the construct need to be removed in order to improve the overall coefficient of reliability. For example, three items of exhaustion (EX2, EX4 and EX5) were removed. After removing the three items, the Cronbach's alpha of the dimension has increased from 0.48 to 0.82. Similarly, three items of vigour, (VI2, VI3 and VI5) were removed so that the Cronbach's alpha improved – increased from 0.60 to 0.75. For dedication and psychological demands, only one item of each dimension

(DE5 and PsD1) was removed. Other removed items were SD3 and SD6 (for skill discretion), SS1 and SS5 (for supervisor support), and CS1 and CS2 (for co-worker support). For details, please see Table 3.2.

Table 3.2: The Reliability Coefficients (Cronbach's alpha), after the Removed of Non-reliable Items

Construct	Dimension of the construct	Items	Cronbach's alpha (α)
Burnout ($\alpha = 0.71$)	Exhaustion	EX1	0.82
		EX2*	
		EX3	
		EX4*	
		EX5*	
	Cynicism	CY1	0.85
		CY2	
		CY3	
		CY4	
		CY5	
	Professional efficacy	PE1	0.82
		PE2	
		PE3	
		PE4	
		PE5	
PE6			
Work Engagement ($\alpha = 0.88$)	Vigour	VI1	0.75
		VI2*	
		VI3*	
		VI4	
		VI5*	
		VI6	
	Dedication	DE1	0.74
		DE2	
		DE3	
		DE4	
		DE5*	
	Absorption	AB1	0.76
		AB2	
		AB3	
		AB4	
AB5			
AB6			
Job Demands ($\alpha = 0.76$)	Psychological demands	Psd1*	0.72
		Psd2	
		Psd3	
		Psd4	
		Psd5	
		Psd6	
		Psd7	
		Psd8	
	Physical demands	PhyD1	0.73
		PhyD2	
		PhyD3	
		PhyD4	
		PhyD4	

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Construct	Dimension of the construct		Items	Cronbach's alpha (α)
Job Resources ($\alpha = 0.73$)	Decision Latitudes ($\alpha = 0.77$)	Skill discretion	SD1	0.72
			SD2	
			SD3*	
		SD4		
		SD5		
		SD6*		
	Decision authority	DA1	0.74	
		DA2		
		DA3		
	Social Support ($\alpha = 0.82$)	Supervisor support	SS1*	0.85
			SS2	
			SS3	
SS4				
SS5*				
SS6				
Co-worker support	CS1*	0.71		
	CS2*			
	CS3			
	CS4			
	CS5			
	CS6			
Corporate Volunteerism ($\alpha = 0.92$)	Values	V1	0.81	
		V2		
		V3		
		V4		
		V5		
	Understanding	U1	0.91	
		U2		
		U3		
		U4		
		U5		
		U6		

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Where: *Item deleted to obtain higher Cronbach alpha

Exploratory factor analysis (EFA) was used to explore the relationships among the variables that do not have an a priori fixed number of dimensions (Baglin, 2014). If researchers have a developed hypothetical model based on previous studies referenced, then the procedures of EFA was not recommended (Astrachan, Patel, & Wanzenried, 2014; Marsh, Lüdtke, Nagengast, Morin & Von Davier, 2013).

The aims of this study was to test the viability of current research model that integrate JD-R model and theory of social exchange in explaining courier dispatch worker's responds towards JD, JR and CV on their WE and burnout. As such, EFA will not be performed to evaluate the validity of the constructs in this study.

3.4.1.7 Facilitators of the questionnaire

In distributing the questionnaire using drop-off and pick-up method, current study's facilitators were trained to assist the respondents in answering the questionnaire. Such assistant is useful to help the respondents to understand the initial meaning of each item and what each item statement try to measure. To ensure the survey can be smoothly carried out, the facilitators need to possess certain level of social and refereeing skills so that they can guide the participants to respond voluntary and provide the answer that can best represent their perceptions on each item of the respective constructs (Claydon, 2015). The facilitators were informed about the purpose of study and, were reminded to be neutral and maintain their open-mindedness during the data collection time.

The facilitators were also trained on the ethical issues that are required during data collection and how to handle respondents' inquiry without prompting the workers to provide bias response. Moreover, facilitators were trained by engaging them in pre-test and pilot studies so that they can gain more practical understanding and experience before the main survey.

3.4.2 Data Analyses Method

In running the SEM analysis, Covariance Based (CB-SEM) method was used to confirm the hypothesized model (also referred as confirmatory analysis). Statistical software, IBM AMOS version 22 was used to perform the hypotheses testing. With AMOS graphical user interface, the modelling of the structural relationship between the examined constructs and its associate observed variables were tested (Byrne, 2016).

Assessment of missing data, outliers, non-normality and multicollinearity were carried out to ensure the quality of estimated parameters can meet the minimum requirements. Missing data can distort the research result and may cause researchers to draw incorrect inferences about a general population from the sample. Therefore, current author used the following methods – listwise deletion and maximum likelihood (ML) – to assess the pattern of missing values, which could be missing completely at random, or missing at random, or missing not at random (Newman, 2014). By computing a representative value that could fill up the missing value, the distortion between the original value and impartial parameter can be minimized (Baraldi & Enders, 2010; Karanja, Zaveri & Ahmed, 2013).

The presence of the outliers may produce misleading result from inflated or deflated data points (Bollen, 2014). Therefore, square mahalanobis distance (D2) test was carried out. If the probability related with D2 is 0.001 or less, outlier issue therefore is happening in the study (Bollen, 2014). To ensure the outliers do not affect the predictors significantly, the Cook's distance and leverage

coefficients were computed too, in which the coefficients need to be lower than 1.0 and 0.5 respectively (Stevens, 1992). As per Bollen (2014) suggestion, all outliers shall remove to avoid errors in statistical.

Non-normality data may generate bias result. However, multivariate non-normality issue is common in research which can emerge in any situations (Byrne, 2016). To tackle this issue, Mardia's test was carried out. The distribution of data can be considered as not normal if the coefficient of multivariate critical ratio is greater than five. Another related issue was named as univariate non-normality which can be examined by using Kurtosis test (Byrne, 2016). If the coefficient of kurtosis absolute was greater than 3.0, the distribution of data therefore can be considered as not normal (Byrne, 2016).

Multicollinearity analysis was carried out to ensure the studied independent variables are not closely related to each other. When the independent variables were highly correlated, the respective variables may need to be combined or one of the variables may need to be deleted (Chong, Seow & Lee, 2015). Multicollinearity issue was tested by running the variance inflation factor (VIF) test. If the VIF's coefficient is more than 10, subsequent action may need to be undertaken to reduce the multicollinearity issue (Hair, Black, Babin, & Anderson, 2014).

On top of that, current author also examined the coefficients of correlation between each pair of independent variables. Although correlation between independent variables was expected, the correlation coefficient between each

pair of independent variables should be lower than 0.85 (Awang, 2015; Krehbiel, 2004).

To test the validity and reliability of the measurement model, unidimensionality assessment was tested first (Awang, 2015). An item was considered unidimensional when that item measures only one construct. If the item can measure other construct, further adjustment on collected data is required. To meet the unidimensionality's requirement, the loading value of each item must be lower than minimum loading value of 0.5 (Hair et al., 1987; Kline, 2015).

The validity of measurement model was assessed by running the convergent, discriminant, and constructs validity tests. Convergent validity test was necessary to check whether respondents have assessed all the items used to measure a construct at a consistent manner (Chong et al., 2015). To ensure each item was convergent in measuring the same construct, the coefficients of factor loading and average variance extracted (AVE) were estimated. Convergent validity was not an issue if the coefficient of: (1) factor loading for each item was higher than 0.5 (Chong et al., 2015; Hair et al., 1987) and (2) AVE of each construct was higher than 0.5 as well (Chong et al., 2015; Fornell & Larcker, 1981).

Discriminant validity test on measurement model was carried out to ensure that the respondents had differentiate the items that have been used to measure a construct with items that are meant to measure another construct (Chong et al., 2015). Awang (2015) and Krehbiel (2004) suggested that discriminant validity

can be achieved if the coefficient of correlation between the pair of constructs is not exceeding 0.85. Alternatively, if the coefficient of correlation of one construct with another construct was lower than the square root of the AVE coefficient of that construct, discriminant validity thereby was not an issue (Chong et al., 2015).

The third validity test: construct validity was assessed by checking the measurement model's goodness of fit indices: absolute fit, incremental fit and parsimonious fit (Awang, 2015). It was used to ensure whether sample data are consistent with distribution in H0 or not. In short, measures of goodness of fit summarize the differences between observed and expected values under a hypothesized model. The details are shown in Table 3.3.

Table 3.3: Selected fit indices and acceptable thresholds

Category	Definition	Name of index	Acceptance threshold
Absolute fit	Determine how well the model fits the data	Chi-square (χ^2) RMSEA SRMR	$p > 0.05$ < 0.08 < 0.08
Incremental fit	Compare the chi-square value with baseline model to identify correlation among the variables	CFI TLI	> 0.9 > 0.9
Parsimonious fit	Analyses the dependence between the estimation process and sample data	Normed Chi-square (χ^2/df)	< 3.0

Sources: Awang (2015); Kline (2015)

Apart from checking the data's validity, it was necessary to check the reliability of the collected data too. The reliability of measurement model's data was examined by estimating the Composite Reliability (CR) and Average variance

Extracted (AVE) coefficients. The result of CR was claimed to be more reliable than Cronbach's alpha, because CR method is based on the assumption that the loading of the items have different weightage (Hair et al., 2014). Overall, the coefficient of CR for each construct should not be lesser than 0.7 (Chong et al., 2015; Fornell & Larcker, 1981). If the coefficient of AVE was more than 0.5, the construct of the measurement model therefore can be considered as reliable (Chong et al., 2015; Fornell & Larcker, 1981).

3.5 Summary of Present Research Methodology

Quantitative approach was used as both theories: JD-R model and Social Exchange Theory have been tested by worldwide researchers on respondents working in various sectors since 2000s. Dispatch workers were targeted in this study because the study on blue collar workers was limited in literature and their work performance can affect the courier company's reputation. Current research methodology was carefully planned and implemented so that the low respond rate can be minimized and the results can be generalized. To ensure the data was ethically collected, letter of requisition for approval were sent to selected courier companies prior to data collection.

To answer the first research question, one main and two sub-hypotheses were developed to measure the effects generated by JD on burnout. In answering the second research question, two main hypotheses were developed to assess the JR direct effect on WE and its moderating effects on JD and burnout. As the construct of JR is composing of two dimensions, two sub-hypotheses were developed under each of the main hypothesis. The effect of CV on WE which

was raised in the third research question was tested by one main and two sub-hypotheses. The hypotheses were tested and confirmed by using Covariance Based-SEM approach as the statistical analysis is robust in analyzing the latent relationship of each construct and dimension, structural relationship, and data's validity and reliability. The following chapter four describes the study's result. In addition, the confirmed hypotheses was compared to past studies' results so that the current result can be interpreted meaningfully.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the data analysis and findings from 350 questionnaires completed by dispatch workers. The analysis of data is divided into a few sub-topics to explain the sample's demographic characteristics, screen of the collected data for modification (if any), evaluate the data's validity and reliability, confirm the hypotheses and compare to past studies' results and finally, discuss the data findings.

4.2 Demographic Characteristics of the Sample

As shown in Table 4.1, respondents were generally classified according to their demographic profile: gender, age, race, citizenship, highest qualification attained or current pursuing, current occupation level and service period. Male worker has accounted to 90.3% of the total sample respondents and more than half of the respondents were aged 21 to 40 years, which is similar to distribution of Malaysian working population by age (Department of Statistics Malaysia, 2018).

The Malays, the main population in Malaysia in terms of race (Department of Statistics Malaysia, 2018), was the largest in terms of sample size. All the respondents were Malaysian and this is in line with the Malaysian government's initiative to reduce the employment of foreign labour since 2017 (Department of Statistics Malaysia, 2018). Overall, based on the distribution of the respondents' characteristics, the respondents could represent the characteristics of the target

population: dispatch workers in Malaysia's courier companies.

Table 4.1: Demographic Profile of the Sample

Demographic	Groups	Frequency count	Percentage of frequency count	Cumulative Percent
Gender	Male	316	90.3	90.3
	Female	34	9.7	100
Age (years)	Less than 20	25	7.1	7.1
	21 to 40	229	65.4	72.6
	41 to 55	96	27.4	100
	More than 55	0	0	100
Race	Malay	328	93.7	93.7
	Chinese	0	0	93.7
	Indian	22	6.3	100
	Others	0	0	100
Citizenship	Malaysian	350	100	100
	Others	0	0	100
Highest qualification attained/currently pursuing	SPM/STPM	320	91.4	91.4
	Diploma	22	6.3	97.7
	Degree (Bachelor/	5	1.4	99.1
	Master/	3	0.9	100
	Doctorate) Others			
Current occupation level	Operational	316	90.3	90.8
	Executive	28	8.0	98.8
	Managing	6	1.7	100
	Others	0	0	100
Service tenure period in the current company (years)	1 to 5	271	77.4	77.4
	6 to 10	79	22.6	100
	More than 10	0	0	100
	Others	0	0	100

Majority of the respondents were educated up to secondary level (SPM/STPM), which is in line with the government's intention to encourage the nations to complete their secondary or high school education. Basically, staffs in the dispatch department or division were ranked into four levels, operational, executive, managing, and others. The respondents of this study were chosen from each job level because Dispatch worker from all level of job designations in the dispatch division was chosen in this study because according to data provided

by U.P.S, dispatch workers from all level of job designations have long been an entry point for employment at U.P.S. (United Parcel Service, 2016).

Most of the staff in this department or division was ranked operational level as many manpower hours were needed from them in delivering the mail parcels. Executive and managing level staffs are higher level staff and were composed by lesser number of staff as compared to the operational level. Majority of operational level staff were only secondary or high school educated. Higher educated workforce may not prefer to work in manual operation work.

Less than 30% the respondents have worked in the studied courier companies for more than five years. This has supported the published data that the turnover rate of courier dispatch workers is at an alarming stage. Therefore, research on how job demands, job resources, job burnout, and work engagement are interrelated is important if the courier companies intended to reduce the turnover rate and possibly improve their work performance.

4.3 Data Screening

To ensure parameters are error-free, the collected data were examined for missing data, availability of outliers, non-normality and multicollinearity. The following data screening processes were undertaken based on the 350 usable questionnaires. As indicated in section 3.4.1.6, items that have resulted to low reliability for the respective construct have been removed from the main study.

4.3.1 Assessment Missing Data

As missing data may draw incorrect inferences about the population's actual behavior, facilitators were trained to minimize the incidents of missing data. They were informed of current study's aim and objectives and, were reminded to be open-minded upon collecting data from respondents. Therefore, a complete 350 cases without missing values was collected and used in subsequent statistical analyses.

4.3.2 Assessment of Outliers

After removing all the unreliable items that were found in the pilot test's reliability analysis, the remaining items need to be further tested. To avoid the possibility of generating misleading findings as a result of inflated or deflate points, a few statistical analyses were carried out to examine the issue of outlier.

The squared mahalanobis distance (D^2) test is employ to detect the availability of multivariate outlier. From Table 4.2, two multivariate outlier cases were detected in the data set because the coefficient of the probability (p_1) is less than the threshold value, 0.001.

Table 4.2: The Result of Mahalanobis Distance Analysis

Observation number	Mahalanobis d-squared	p_1
79	41.139	0.00000
110	17.707	0.00051

Where: p_1 refers to the probability of an observation to exceed the square mahalanobis distance

The nature of the outlier issues however need to be examined first before deciding to remove or retain the two outlier cases. Cook's distance and leverage analysis were carried out to estimate the effect of identified multivariate outliers

on the employees' job burnout and work engagement in the current study. As the scores of Cook's distance and leverage maximum values are below than the acceptance thresholds of 1.0 and 0.5 respectively (shown in Table 4.3), the effect that can be generated by the existing outliers therefore is non-significant.

Table 4.3: The Result of Cook's Distance and Leverage Analysis

	N	Minimum	Maximum	Mean
Cook's Distance	350	0.034	0.090	0.003
Centered Leverage Value	350	0.000	0.118	0.009

Where: N: Sample size

Overall, the results of the outlier test, Cook's distance and leverage analysis suggested that the detected multivariate outlier cases did not create significant effect on the predictor of variable, employees' burnout and WE. Probably, this is because the total number of multivariate outlier cases was only 0.6% of the number of cases in the current data set or only two outlier cases in the 350 cases. The outlier's effect therefore could have created very mild negative effect on the parameters estimated in the present study.

4.3.3 Assessment of Normality

In assessing the univariate and multivariate normality of the data, a number of methods have been followed. To test the univariate normality, the absolute value of skewness and kurtosis for each item were calculated. According to Kline (2015), non-normality happens when the measured item's absolute value of kurtosis item is greater than 3.0.

Table 4.4 shows that as none of the item's kurtosis absolute value is more than 3.0, univariate normality therefore is not an issue in this study. Meanwhile, to

tackle the multivariate normality issue, the multivariate critical ration (CR) coefficient was computed. From Table 4.4, the coefficient of multivariate CR is amounted to 74.6, which is much greater than recommended threshold value of five. This indicates that multivariate non-normality among the measurement items exist. The present of multivariate non-normality in current study could be possibly caused by the existent of multivariate outlier. As mentioned in the previous sub-chapter, the result of Cook's distance and leverage test has showed that the effect of prior detected multivariate outliers was found to be non-significant.

Table 4.4: The Result of Normality Assessment

Dimensions of studied construct	Item	Min	Max	Skew	C.R.	Kurtosis	C.R.
Exhaustion	EX1	1.000	4.000	-.620	-4.738	-.360	-1.373
	EX3	1.000	4.000	-.776	-5.930	-.094	-.359
Cynicism	CY1	1.000	4.000	-.830	-6.338	.211	.807
	CY2	1.000	4.000	-.778	-5.946	.223	.851
	CY3	1.000	4.000	-.378	-2.888	-1.029	-3.930
	CY4	1.000	4.000	-.398	-3.043	-1.474	-5.630
	CY5	1.000	4.000	-.349	-2.663	-.832	-3.179
Professional efficacy	PE1	1.000	4.000	-.094	-.718	-1.110	-4.238
	PE2	1.000	4.000	-.024	-.183	-1.402	-5.354
	PE3	1.000	4.000	.024	.182	-1.484	-5.666
	PE4	1.000	4.000	-.046	-.349	-.921	-3.517
	PE5	1.000	4.000	-.162	-1.237	-1.283	-4.901
	PE6	1.000	4.000	-.076	-.580	-.980	-3.741
Vigour	VI1	1.000	4.000	-.800	-6.112	-.216	-.824
	VI4	1.000	4.000	-.795	-6.070	-.149	-.570
	VI6	1.000	4.000	-.722	-5.515	-.096	-.365
Dedication	DE1	1.000	4.000	-.625	-4.772	-.542	-2.068
	DE2	1.000	4.000	-.798	-6.094	.043	.163
	DE3	1.000	4.000	-.796	-6.080	-.688	-2.626
	DE4	1.000	4.000	-1.262	-9.639	1.835	7.008
Absorption	AB1	1.000	4.000	-.909	-6.941	.648	2.476
	AB2	1.000	4.000	-.785	-5.992	-.164	-.625
	AB3	1.000	4.000	.141	1.074	-.637	-2.432
	AB4	1.000	4.000	-.661	-5.051	-.612	-2.337
	AB5	1.000	4.000	-.899	-6.869	.074	.282
	AB6	1.000	4.000	-.478	-3.648	-.873	-3.333
Psychological demands	PsD2	1.000	4.000	-.412	-3.145	-.603	-2.302
	PsD3	1.000	4.000	-.427	-3.263	-.704	-2.689
	PsD4	1.000	4.000	-.667	-5.098	-.090	-.342
	PsD5	1.000	4.000	-1.029	-7.860	-.309	-1.180
	PsD6	1.000	4.000	-.196	-1.495	-.748	-2.855
	PsD7	1.000	4.000	-.687	-5.247	-.126	-.483
	PsD8	1.000	4.000	.308	2.349	-1.105	-4.220
	Physical demands	PhyD1	1.000	4.000	.100	.766	-.997
PhyD2		1.000	4.000	-.745	-5.689	.165	.629
PhyD3		1.000	4.000	-.783	-5.982	.184	.701
PhyD4		1.000	4.000	-.782	-5.974	-.081	-.311
Skills discretion	SD1	1.000	4.000	-.830	-6.341	.297	1.135
	SD2	1.000	4.000	-.820	-6.262	1.717	6.556
	SD4	1.000	4.000	-.553	-4.225	.084	.321
	SD5	1.000	4.000	-1.061	-8.100	1.184	4.522

continue next page

Dimensions of studied construct	Item	Min	Max	Skew	C.R.	Kurtosis	C.R.
Decision authority	DA1	1.000	4.000	-1.245	-9.512	.066	.251
	DA2	1.000	4.000	-.635	-4.851	-.180	-.687
	DA3	1.000	4.000	-.309	-2.361	-1.540	-5.879
Supervisor support	SS2	1.000	4.000	-.752	-5.747	.229	.876
	SS3	1.000	4.000	-.804	-6.139	.646	2.466
	SS4	1.000	4.000	-.810	-6.183	.387	1.478
	SS6	1.000	4.000	-.723	-5.518	.382	1.460
Co-worker support	CS3	1.000	4.000	-.706	-5.390	.505	1.930
	CS4	1.000	4.000	-.628	-4.800	-.025	-.096
	CS5	1.000	4.000	-.740	-5.655	.195	.746
	CS6	1.000	4.000	-.422	-3.220	-.460	-1.758
Value	V1	1.000	4.000	-.954	-7.289	1.152	4.398
	V2	1.000	4.000	-.800	-6.114	.186	.711
	V3	1.000	4.000	-1.104	-8.432	2.645	10.101
	V4	1.000	4.000	-.751	-5.732	.334	1.277
	V5	1.000	4.000	-1.029	-7.861	1.300	4.963
Understanding	U1	1.000	4.000	-.769	-5.874	.304	1.162
	U2	1.000	4.000	-1.014	-7.742	1.150	4.394
	U3	1.000	4.000	-.699	-5.342	.529	2.019
	U4	1.000	4.000	-.875	-6.681	.503	1.921
	U5	1.000	4.000	-.823	-6.290	.465	1.774
	U6	1.000	4.000	-.703	-5.372	.439	1.675
Multivariate							74.594

Notes: Sample size (N) = 350.

Where c.r: critical ratio.

4.4 Descriptive Statistics Analysis

4.4.1 Means, Standard Deviation and Correlation

Correlation between the studied constructs is expected but the questions is how much is the maximum value that can be tolerated? According to Awang (2015), the correlation coefficient between each pair of independent variables should be lower than 0.85. From Table 4.5, the correlation coefficient between the pair of the following constructs – (1) JD and WE; (2) JR and CV; (3) JR and WE – was higher than the recommended threshold value, 0.85, which indicating that these pair of constructs are highly correlated or has strong relationship.

Table 4.5: Means, Standard Deviation and Correlation among the Studied Constructs

	M	SD	JD	JR	CV	WE	JB
JD	2.90	0.632	1				
JR	2.95	0.623	0.794**	1			
CV	2.86	0.685	0.786**	0.905**	1		
WE	2.83	0.708	0.856**	0.856**	0.872**	1	
JB	2.45	0.651	0.528**	0.622**	0.661**	0.578**	1

Where

M: Mean; CV: Corporate Volunteerism;
 SD: Standard Deviation; WE: Work engagement;
 JD: Job Demand; JB: Job Burnout;
 JR: Job Resources; **p<0.01.

Before deciding whether to combine or delete certain highly correlated construct, it is necessary to confirm whether the construct's dimensions are closely related to each other by running the multicollinearity analysis. The result show in Table 4.6 implies that multicollinearity is not a problem in estimating parameters in the current study because the tolerance coefficients are greater than 0.1 and VIF values are smaller than the recommended threshold of 10 (Hair et al., 2014).

Table 4.6: The Result of Multicollinearity Statistic Analysis

Independent variables	Collinearity statistics	
	Tolerance	VIF
Job demand	0.345	2.900
Job resources	0.163	6.128
Corporate volunteerism	0.169	5.921

Where

Dependent variables: Burnout & Work engagement;
 VIF: Variance Inflation Factor

Overall, based on the data screening test and multicollinearity results, all the studied constructs and its dimensions were remained for further statistical analyses. Nevertheless, certain items of the dimensions were omitted due to reliability issue that was found in the pilot study.

4.5 Measurement and Structural Model Assessment

The SEM can be organized into two parts. First, the measurement model is built to form the relationship between latent variables and their respective measurement items. Second, the causal relationships between the independent variables and the dependent variable can be established by using structural model analysis.

4.5.1 Measurement Model Analysis

The purpose of measurement model is to test the relationship between latent variables and their respective measurement items. Confirmatory factor analysis (CFA) is employed for validating the latent constructs of measurement model. Figure 4.2 presents a pooled CFA model which was developed from sixty three (63) items. In details, the items were referring to the reliable items that had been measured by using reliability analysis and retained after the pilot study (see Table 3.2). For example, only three out of five exhaustion dimensions' items were tested in CFA.

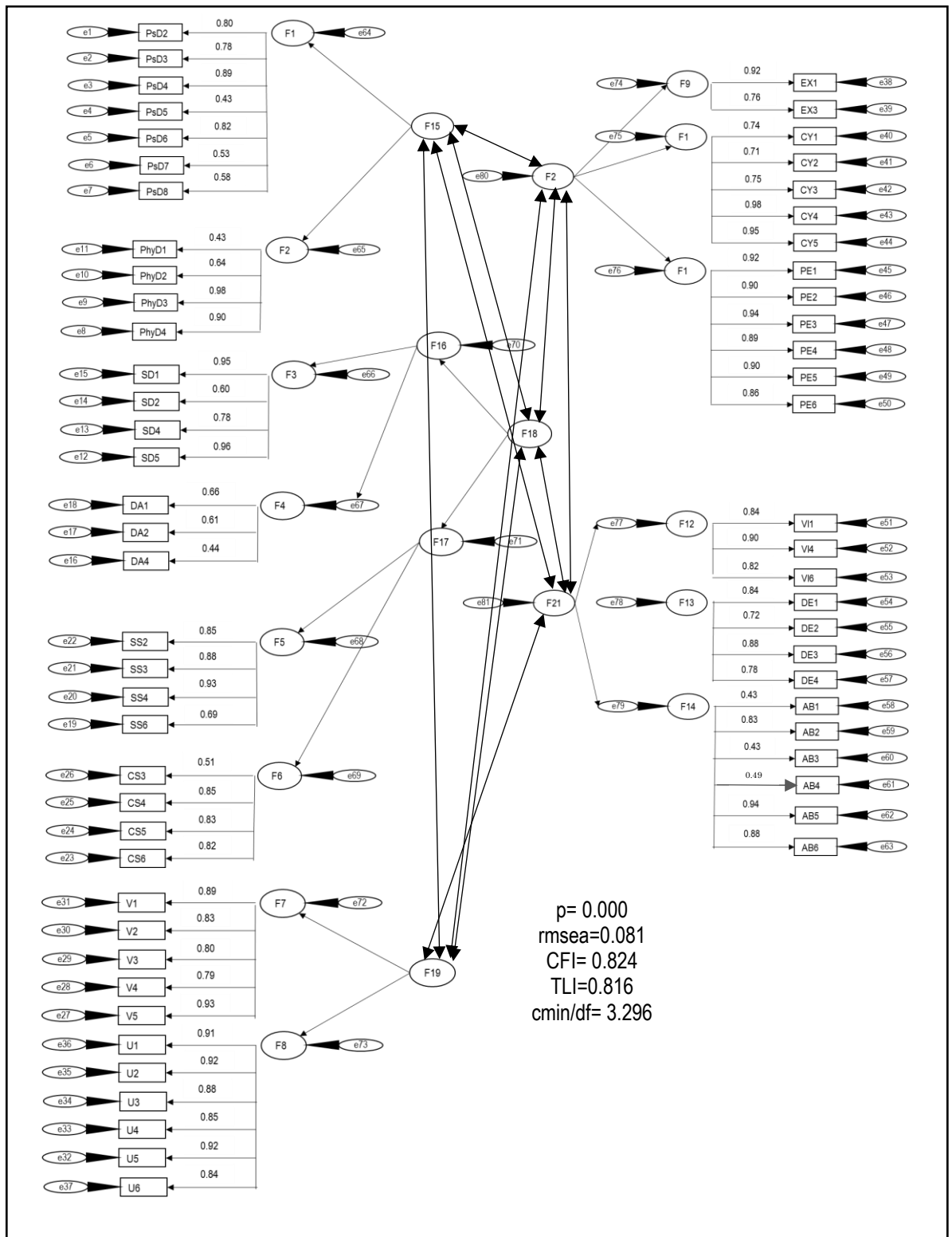


Figure 4.1.: Initial Measurement Model (Model 1)

Note:

F1: Psychological demands
F2: Physical demands
F3: Skills discretion
F4: Decision authority
F5: Supervisor support
F6: Co-worker support
F7: Value
F8: Understanding
F9: Exhaustion
F10: Cynicism
F11: Professional efficacy

F12: Vigour
F13: Dedication
F14: Absorption
F15: Job Demands
F16: Decision Latitude
F17: Social Support
F18: Job Resources
F19: Corporate Volunteerism
F20: Burnout
F21: Work Engagement

The CFA method can evaluate the unidimensionality, validity and reliability of the present study's measurement model simultaneously. With CFA, any item that does not fit the measurement model would be removed. The results are discussed in the following sub-sections.

4.5.1.1 Unidimensionality assessment

This sub-topic will test whether each item can be considered as unidimensional or able to measure the respective dimension construct. In order to attain unidimensionality status, all items with factor loading below than the threshold value of 0.5 should be removed from the measurement model (Awang, 2015; Hair et al., 1987).

The CFA result (see Figure 4.2) shows that the initial measurement model did not attain unidimensionality status and therefore, the model needs to be modified. The following six items were removed in six iterations one after another: PsD5, PhyD1, DA3, AB1, AB3, and AB4 because its factor loading coefficient of each item is less than 0.5.

In spite of the removal of six items, the total deleted items were only accounting to 9.5% (six out of 63 items), which is below the recommended threshold value of 20% (Awang, 2015). This means the modified dataset can be used for the following measurement model's assessment. Figure 4.3 presents the modified measurement model in which all items have loading values higher than 0.5.

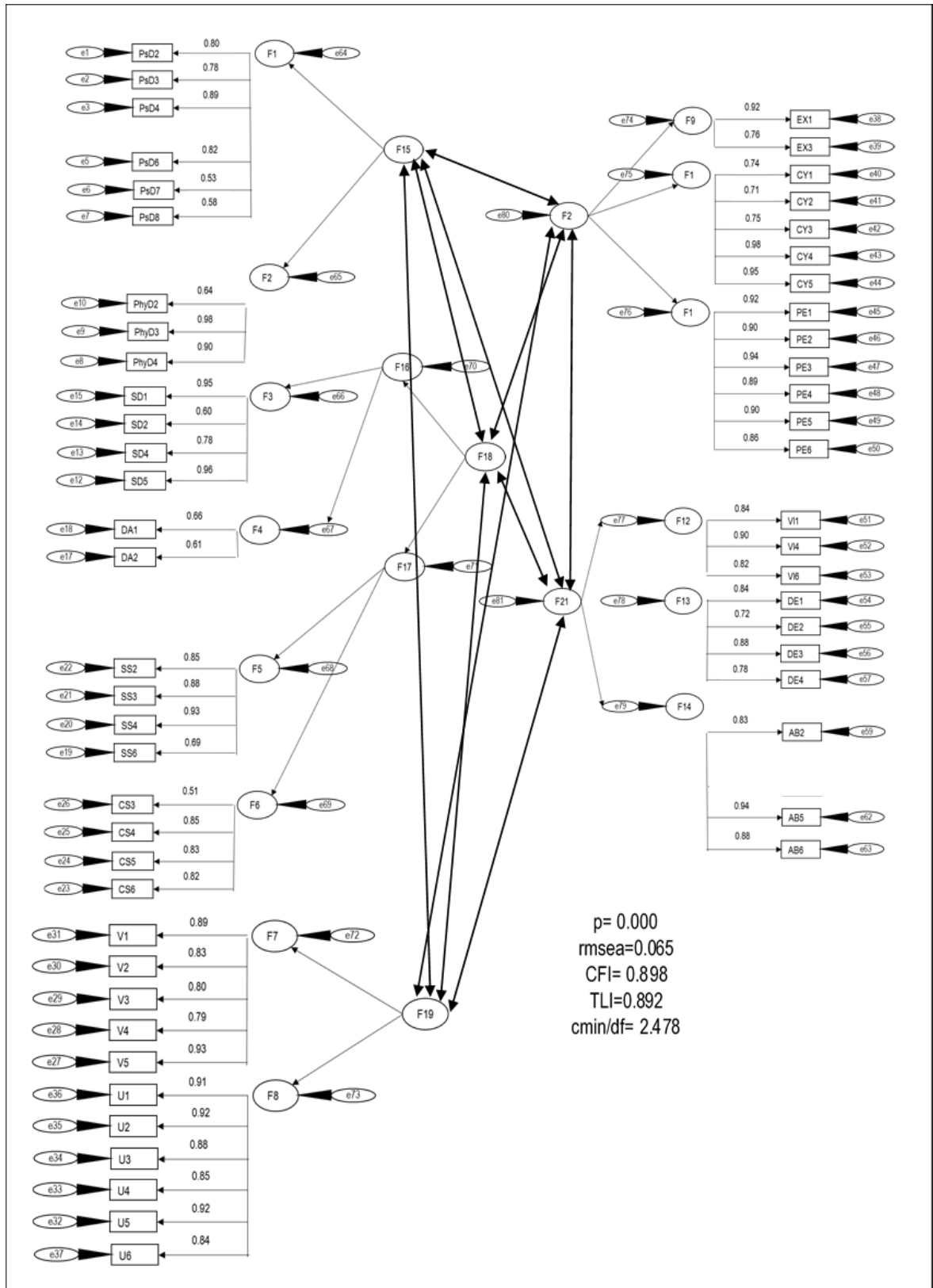


Figure 4.2: Modified Measurement Model (Model 2)

Note:

F1: Psychological demands
F2: Physical demands
F3: Skills discretion
F4: Decision authority
F5: Supervisor support
F6: Co-worker support
F7: Value
F8: Understanding
F9: Exhaustion
F10: Cynicism
F11: Professional efficacy

F12: Vigour
F13: Dedication
F14: Absorption
F15: Job Demands
F16: Decision Latitude
F17: Social Support
F18: Job Resources
F19: Corporate Volunteerism
F20: Burnout
F21: Work Engagement

4.5.1.2 Validity assessment

Model validity was examined by assessing construct, convergent, and discriminant validity. The construct validity, convergent validity and discriminant validity are common methods to assess model validity. To assess the construct validity, absolute, incremental and parsimonious fit indices were examined. As shown in Figure 4.3, certain fitness indexes do not achieve the required level. This indicates that certain items maybe redundant with each other in the measurement model. To find out which items are redundant in the measurement model, the modification indexes were inspected.

In Figure 4.4, correlated measurement error is identified and the pair items are as follows: PsD3 and PsD7, PsD6 and PsD8, SD1 and SD4, U2 and U3, U2 and U5, CY1 and CY2, CY2 and CY3, PE1 and PE2, PE2 and PE3, PE3 and PE5, VI1 and VI6 as well as DE2 and DE3. The redundancies between items have caused the measurement model to have a poor fit. In dealing with redundant items in the model, the correlated measurement errors of redundant items were set as a free parameter.

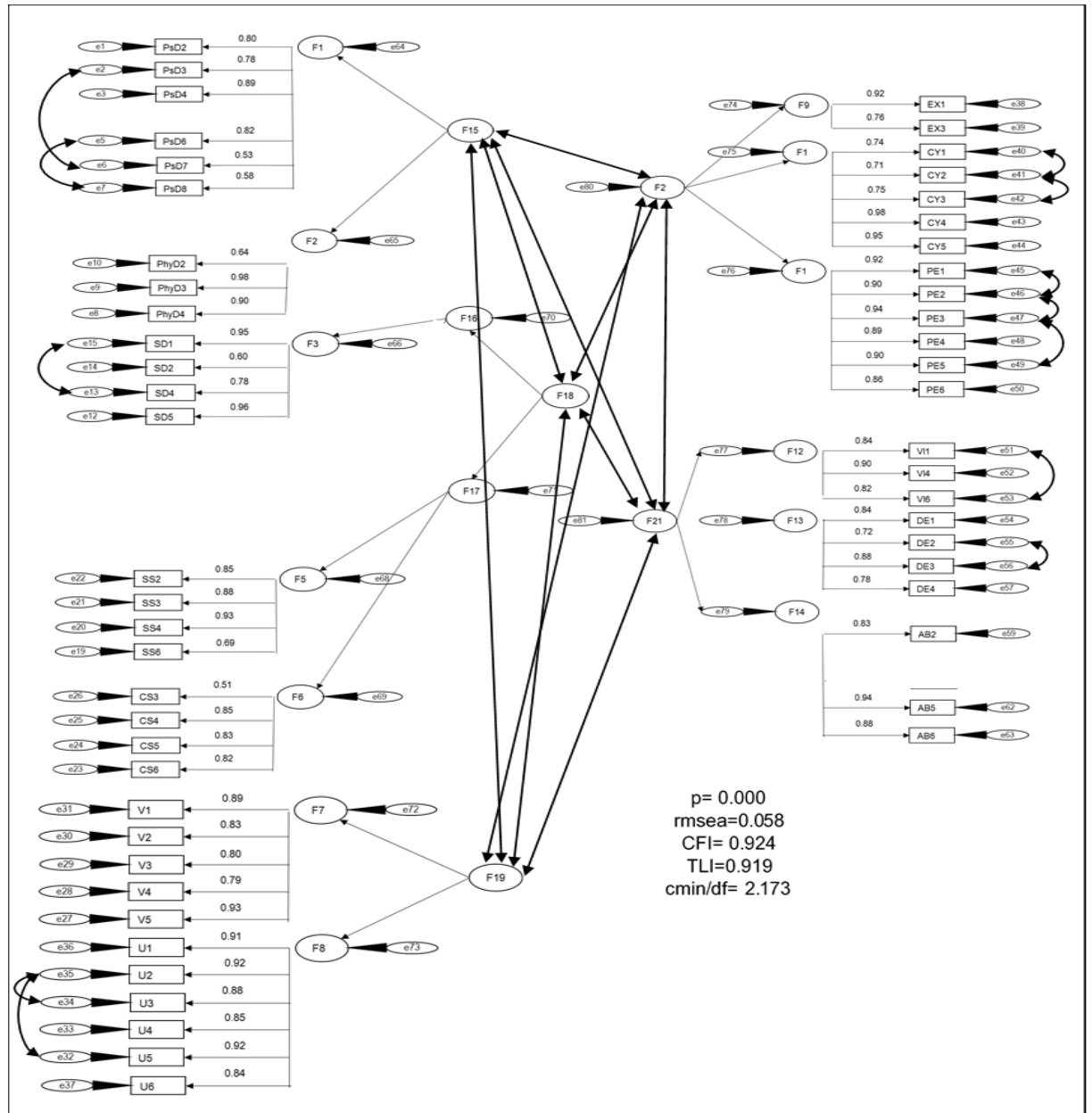


Figure 4.3: Modified Measurement Model (Model 3)

Note:

- | | |
|----------------------------|-----------------------------|
| F1: Psychological demands | F12: Vigour |
| F2: Physical demands | F13: Dedication |
| F3: Skills discretion | F14: Absorption |
| F5: Supervisor support | F15: Job Demands |
| F6: Co-worker support | F16: Decision Latitude |
| F7: Value | F17: Social Support |
| F8: Understanding | F18: Job Resources |
| F9: Exhaustion | F19: Corporate Volunteerism |
| F10: Cynicism | F20: Burnout |
| F11: Professional efficacy | F21: Work Engagement |

The result presented in the Figure 4.4 and all fit indices met the required thresholds (see Table 4.7). For example, the coefficient of RMSEA of the modified measurement model is lower than the maximum threshold of 0.08 and the CFI coefficient is higher than the minimum threshold of 0.90.

Table 4.7: Current Study’s Model Fit Indices

Category	Definition	Name of index	Acceptance threshold	Model 3 Fit Indices
Absolute fit	Determine how well the model fits the data	Chi-square (χ^2)	$p > 0.05$	*
		RMSEA	< 0.08	0.058
		SRMR	< 0.08	0.0575
Incremental fit	Compare the chi-square value with baseline model to identify correlation among the variables	CFI	> 0.9	0.924
		TLI	> 0.9	0.919
Parsimonious fit	Analyses the dependence between the estimation process and sample data	Normed Chi-square (χ^2/df)	< 3.0	2.173

Notes: Sample size (N) = 350 * $p < 0.000$

Convergent validity is achieved because the factor loading of each items are statistically significant and more than the minimum threshold of 0.5 (Awang, 2015; Chong et al., 2015; Fornell & Larcker, 1981) and the average variance extracted (AVE) value of each constructs are more than the minimum threshold of 0.5 (Chong et al., 2015; Fornell & Larcker, 1981) as well – see Table 4.8.

After the removed of DA1 and DA2, the AVE values of all constructs becomes higher than recommended cut off scale (see Table 4.9). In addition, the diagonal

bolded values or the square root of AVE which denote the correlation scores between the same variables have become greater than other correlation scores of the variable with other variables (as shown in Table 4.9). In summary, discriminant validity has been achieved when items DA1 and DA2 were deleted.

Table 4.8: The CFA Results for the Adjusted Measurement Model

Dimension and its sub-dimensions of the construct	Item	Factor loading	CR	AVE			
Construct name: Burnout (CR= 0.94; AVE= 0.74)							
• Exhaustion	EX1	0.92	0.83	0.71			
	EX3	0.76					
• Cynicism	CY1	0.73	0.91	0.68			
	CY2	0.69					
	CY3	0.74					
	CY4	0.97					
	CY5	0.95					
• Professional efficacy	PE1	0.91	0.96	0.81			
	PE2	0.84					
	PE3	0.93					
	PE4	0.90					
	PE5	0.94					
	PE6	0.88					
Construct name: Work Engagement (CR= 0.90; AVE= 0.71)							
• Vigour	V11	0.86	0.9	0.75			
	V14	0.90					
	V16	0.89					
• Dedication	DE1	0.84	0.88	0.64			
	DE2	0.70					
	DE3	0.87					
	DE4	0.78					
• Absorption	AB2	0.83	0.9	0.75			
	AB5	0.86					
	AB6	0.92					
Construct name: Job Demands (CR= 0.87; AVE= 0.6)							
• Psychological demands	PsD2	0.80	0.87	0.54			
	PsD3	0.78					
	PsD4	0.91					
	PsD6	0.80					
	PsD7	0.51					
	PsD8	0.54					
	• Physical demands	PhyD2			0.63	0.88	0.72
		PhyD3			0.98		
PhyD4		0.90					

continue next page

Dimension and its sub-dimensions of the construct	Item	Factor loading	CR	AVE		
Construct name: Job Resources (CR= 0.86; AVE= 0.62)						
• Decision Latitudes (CR=0.83; AVE=0.58)	1. Skills discretion	SD1	0.94	0.9	0.69	
		SD2	0.61			
		SD4	0.76			
		SD5	0.97			
	2. Decision authority	DA1	0.68	0.52	0.36	
		DA2	0.51			
• Social Support (CR=0.88 ; AVE=0.65)	1. Supervisor support	SS2	0.85	0.91	0.71	
		SS3	0.88			
		SS4	0.93			
		SS6	0.70			
		2. Co-worker support	CS3	0.51	0.85	0.59
			CS4	0.85		
		CS5	0.84			
		CS6	0.82			
Construct name: Corporate Volunteerism (CR= 0.95; AVE= 0.77)						
• Value		V1	0.89	0.93	0.72	
		V2	0.83			
		V3	0.80			
		V4	0.79			
		V5	0.93			
• Understanding		U1	0.90	0.96	0.8	
		U2	0.94			
		U3	0.89			
		U4	0.85			
		U5	0.94			
		U6	0.84			

Table 4.9: Discriminative Validity Index Summary

	JD	JR	CV	B	WE
JD	0.775				
JR	0.52	0.787			
CV	0.5	0.54	0.877		
B	0.52	0.54	0.53	0.86	
WE	0.53	0.58	0.58	0.56	0.843

Where

JD: Job Demands;

JR: Job Resources;

CV: Corporate Volunteerism;

B: Burnout;

WE: Work Engagement

4.5.1.3 Reliability assessment

To ensure the modified measurement model is reliable, the Composite Reliability (CR) and Average variance Extracted (AVE) coefficients were estimated. Overall, the CR and AVE coefficients for each dimension construct, except DA1 and DA2 is more than thresholds of 0.7 and 0.5 respectively (Table 4.8; Chong et al., 2015; Fornell & Larcker, 1981). This is also part of the reason why items DA1 and DA2 were deleted from the modified measurement model so that the subsequent modified measurement is fit for structural model analysis. The low CR and AVE coefficients for decision latitude dimension construct could be a result of low number of questions or poor interrelatedness between DA1 and DA2.

4.5.2 Structural Model Analysis

The structural model analysis was carried out to confirm current hypotheses. The structural model was adapted by integrating two established theories: Job Demands-Resource Model and Social Exchange Theory (see Figure 4.5).

The adapted structural model (as shown in Figure 4.5) was adequately fit because all the fit indices could meet the recommended threshold's requirement. Furthermore, the score of SMRS (0.0575) (shown in Table 4.8) is below the recommended threshold score of 0.08. Since the unidimensionality's requirement and all model fit conditions were met in all categories, further modification on the measurement model therefore is not necessary.

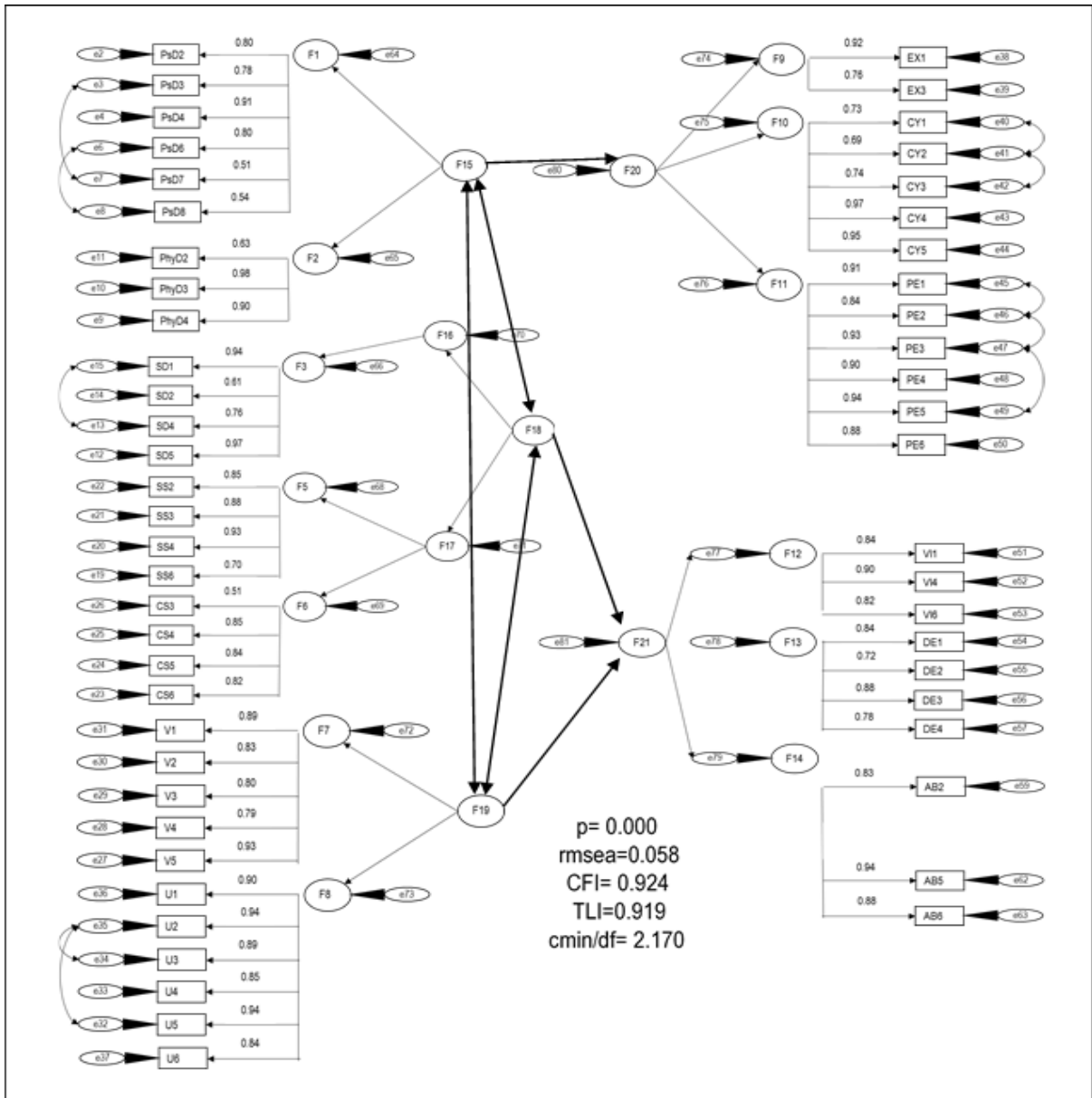


Figure 4.4: Adapted Structural Model from Job Demands-Resource Model & Social Exchange Theory

Note:

F1: Psychological demands
 F2: Physical demands
 F3: Skills discretion
 F5: Supervisor support
 F6: Co-worker support
 F7: Value
 F8: Understanding
 F9: Exhaustion
 F10: Cynicism
 F11: Professional efficacy

F12: Vigour
 F13: Dedication
 F14: Absorption
 F15: Job Demands
 F16: Decision Latitude
 F17: Social Support
 F18: Job Resources
 F19: Corporate Volunteerism
 F20: Burnout
 F21: Work Engagement

From Figure 4.4, the coefficient of R^2 that equals to 28% shows that the JD predictors could explain 28% of the total variance of the courier dispatch workers' burnout feelings. Besides that, JR predictors could explain 77% (depicted by R^2 coefficient) of the total variance of the courier's dispatch workers' reaction on their WE. Also, the CV predictors could explain 77% (depicted by R^2 coefficient) of the total variance of the courier's dispatch workers' reaction on their WE feeling. The following sub-chapters explain the direct and indirect relationships between the examined constructs.

4.5.2.1 Confirming the direct relationships which are statistically significant

To determine the direct relationship on the structural model, all direct paths between the independent and dependent variables in the hypothesized model, the estimates of parameters and its corresponding significance level (p-value) were assessed.

As presented in Figure 4.4 and Table 4.10, JD and physical demands created direct and positive effect on burnout, while JR, social support, corporate volunteerism, value and understanding created direct and positive effects on WE. Psychological demands and decision latitude on the other hand, did not create any direct statistical effect on burnout and WE respectively. Overall, the current results show that not all the hypotheses can be supported. The results shown in Table 4.10 are further discussed in the next sub-sections. The discussion is started from significant hypotheses to non-significant hypotheses.

Table 4.10: Structural Paths Analyses and Direct Hypotheses Testing

Hypotheses	Structural path	Path Coefficient		S.E	C.R
		Standardized	Unstandardized		
H1	JD -- B	0.521***	0.514	0.045	11.416
H1a	PhyD--B	0.495***	0.417	0.049	8.476
H1b	PsD -- B	0.105	0.099	0.055	1.802
H2	JR--WE	0.17**	0.206	0.064	3.239
H2a	DL--WE	0.048	0.055	0.05	1.111
H2b	SOS--WE	0.122*	0.145	0.062	2.35
H4	CV--WE	0.757***	0.862	0.06	14.458
H4a	V--WE	0.403***	0.464	0.075	6.205
H4b	U--WE	0.372***	0.407	0.069	5.897

Where

JD: Job Demands,
 PsD: Psychological Demands;
 PhyD: Physical Demands;
 JR: Job Resources;
 DL: Decision Latitude;
 SOS: Social Support;

CV: Corporate Volunteerism;
 V: Value; U: Understanding;
 B: Job Burnout;
 WE: Work Engagement

* p < 0.05 & ** p < 0.001 ***p<0.000

a) The direct relationship between job demands and job burnout (H1)

Table 4.10 also shows that JD has a significant and positive relationship with burnout ($\beta = 0.521$, $p < 0.000$) and this support hypothesis H1. In other words, the dispatch workers were feeling burnout when they felt that the demands of work had become too much to be tolerated.

This result was in line with other empirical studies that were investigating a wide range of occupations such as teachers (Mojsa-Kaja et al., 2015; Roslan et al., 2015), engineers (Myhre, 2014), health professionals and mechanics (Portoghese et al., 2014), principals (Van Droogenbroeck et al., 2014) and interns (Akkerman et al., 2013); and in many possible working sectors such as industrial work (Enshassi et al., 2015; Useche et al., 2017), communication (Khan et al., 2016; Tian et al., 2015) education (Akkerman et al., 2013; Barkhuizen et al., 2014; Guglielmi et al., 2012) and health care (Maslach & Leiter, 2016; Portoghese et al., 2014).

In summary, JD could influence burnout positively in a broad range of professions, including high skilled and low skilled service workers. Dispatch workers in Malaysia are handling multiple tasks at one time. If too much JD were assigned to the dispatcher such as working for longer hours and handling more daily pick up schedule, the dispatch workers would likely to feel burnout.

Further analyses were carried out to confirm the two sub-hypotheses for the JD construct's dimensions: physical demands and psychological demands. The result shows that only the physical demands dimension is a significant predictor for burnout. The details are discussed in the following text. The non-significant predictors are grouped for discussion in sub-chapter 4.5.2.2.

b) The direct relationship between physical demands and job burnout (H1a)

Hypothesis H1a is supported because physical demands has significantly influence burnout directly and positively ($\beta = 0.495$, $p < 0.000$) (see Table 4.10). The result is not consistent with the following empirical past studies: Bakker & Costa, (2014), Day, Crown & Ivany, (2017) and Nahrgang et al., (2011) in which the past results showed that the dimension of physical demands has not been able to produce statistically significant direct effect on burnout. Probably, this is because the surveyed companies of the past studies were equipped with technology advanced equipment that required less physical contribution from the worker respondents.

The work nature of the dispatch workers however is different. Comparatively, dispatch worker is required to perform many manual tasks such as assigning workers (driver) and arranging vehicles to pick-up and deliver mail items, developing delivery routes throughout the day, monitoring any sudden route change, and sourcing alternative routes that can speed-up the delivery. Being assigned with heavy physical workload, the dispatch workers therefore were inevitably feeling burnout when excessive physical demands were given to them.

c) The direct relationship between job resources and work engagement (H2)

The result indicates that JR can influence WE significantly ($\beta = 0.17, p < 0.001$), hence hypothesis H2 is supported (see Table 4.10). This means workplace which proffers plentiful resources may promote the readiness of workers to commit their attempts and capacity to the job given (Lee, 2015). The finding is apparently consistent to previous empirical job resources studies which have shown that JR play a vital role in promoting work engagement (Chen, Yen & Tsai, 2014; Gabel-Shemueli & Dolan, 2015; Sarti, 2014; Sattar, Ahmad & Hassan, 2015).

However, contradictory result was found when the past authors failed to decomposed the effect that can be generated by JR into more than one dimension (Maslach et al. 2016; Roslan et al. 2015; Woodhead et al. 2016). Accumulating the effects of JR into one dimension may lead to misleading result. This is true when the respondents' reaction towards the items that have been grouped into one dimension differ from another dimension's items.

To alleviate the problem, this study has divided the effect of JR into two main dimensions: decision latitudes and social supports, which are related to hypothesis H2a and H2b respectively. The results that can confirm H2a and H2b have supported current author's argument: each JR's dimension may cause the respondents to react differently towards their WE.

d) The direct relationship between social supports and work engagement (H2b)

Hypothesis H2b that predicts the positive relationship between social supports and WE is supported ($\beta = 0.122$, $p < 0.000$) (see Table 4.10). This is consistent to many past studies' result (Chen et al., 2014; Gabel-Shemueli & Dolan, 2015; Sarti, 2014; Sattar et al., 2015).

For blue collar workers, social support is an important form of JR. The tangible and/or intangible support from supervisors or colleagues can assist the dispatch workers to accomplish their work timely (Delvaux et al., 2018). Overall, social support is an important element that can help individuals to fulfill their basic need for belongingness (Scott et al., 2014).

e) The direct relationship between corporate volunteerism and work engagement (H4)

The SEM result supports H4 or CV and WE are positively related ($\beta = 0.757$, $p < 0.000$) (see Table 4.10). This implies that when dispatch workers were involved in CV activities, they would become more engage in work.

The result is apparently in line with social exchange theory which theorized that employees may increase their WE (in terms of vigorous and dedication contributions) if employers can provide continuous opportunities for them to participate in community service activities voluntary (Rodell, Breitsohl, Schröder & Keating, 2016). In addition, the support of this hypothesis also corroborates with Albdour and Altarawneh (2012), and Allen's (2013) study result.

Appreciation for CV activities can be grouped into two dimensions: value (related to H4a) and understand (related to H4b) as both sub-dimensions are not highly correlated (Allen, 2013; Abu Khalifeh & Som, 2013; Albdour & Altarawneh, 2012; Biswas & Bhatnagar, 2013; Biswas et al., 2013). People who value the companies' CV activities may respond differently towards their WE than those who understand the motive of the CV. The study's results are discussed as below.

f) The direct relationship between employees who valued the corporate volunteerism activity and work engagement (H4a)

The support of H4a at precision level of 0.05 ($\beta = 0.403$) shows that the dispatch workers did value the CV activities and were motivated to be more engaged in work if such activity is carried out (see Table 4.10). The result is in line with social exchange theory's proposition (Allen, 2013).

Current finding is supporting the following past studies' result that had surveyed employees from various occupational fields (Allen, 2013; Abu Khalifeh & Som,

2013; Albdour & Altarawneh, 2012; Biswas & Bhatnagar, 2013; Biswas et al., 2013). In brief, dispatch workers who valued CV would be more motivated to engage in work compare to those who do not.

g) The direct relationship between employees who understand the motive of corporate volunteerism activity and work engagement (H4b)

Hypothesis H4b I supported as well ($\beta = 0.372$, $p < 0.000$) and this implies that dispatch workers were more likely to be engaged in their work if they can understand why their company decided to undertake certain CV activity. This result supports the proposition of social exchange theory and the following past researchers work - Allen (2013); Abu Khalifeh and Som (2013); Albdour and Altarawneh (2012); Biswas and Bhatnagar (2013); Biswas et al., (2013).

Overall, to motivate the dispatch workers to be more engaged in their work, it is important for the companies to know which corporate volunteerism activities are valued by their workers and to inform them of the company's motive.

4.5.2.2 Statistically insignificant direct relationships

a) The direct relationship between psychological demands and job burnout (H1b)

Table 4.10 depicts that hypotheses H1b is not supported or psychological demands could not influence burnout significantly ($\beta = 0.105$, $p > 0.05$). Though the finding is contradict with García-Sierra, Fernández-Castro and Martínez-Zaragoza (2016),

Kar and Suar (2014) and Schaufeli and Taris's (2014) studies results, the current result is consistent with Lizano and Barak (2015) and Schaufeli (2015) studies, which had shown both dimensions of JD: physical demands and psychological demands are not related to burnout significantly.

This is probably due to different perceptions of dispatch workers toward psychological demands and burnout. Some workers may feel that when they were experiencing psychological demands such as the need to work hard, they would mentally feel burnout in job. On the other hand, another group of workers may react contrary or may be motivated to work harder. In summary, the discrepancy of respond towards the effect that can be created by psychological demands on burnout may have cause the hypothesis to be not supported.

b) The directs relationship between decision latitude and work engagement (H2a)

The dimension of JR: decision latitude comprises of two sub-dimensions: skill discretion and decision authority. However, prior to the structural model testing, the items for decision authority have been deleted due to poor convergent validity. As a result, only the items for skill discretion were maintained in confirming hypotheses H2a.

Table 4.10 depicts that hypotheses H2a is not supported or decision latitude could not influence WE significantly ($\beta = 0.048$, $p > 0.05$). The finding is contradicted with studies carried out by Chen et al. (2014), Gabel-Shemueli and Dolan, (2015),

Sarti (2014) and Sattar et al. (2015). Nevertheless, the finding is consistent with Bria et al. (2014) and Roslan et al.'s (2015).

Plausibly, this is because the respondents had given inconsistent reaction toward the items that have been used to measure skill discretion. Some dispatch workers may feel that if they were given freedom of judgment or choice on how to perform assigned job, they would be motivated to be more engaged in work. However, a number of the workers were having contradictory perception.

4.5.2.3 Testing the moderating effect of job resources

In this study, the moderating role of JR in between JD and burnout was tested. As JR is made up by two main dimensions – decision latitude and social support – it would be beneficial to check which of these dimensions can actually create the moderating effect significantly or non-significantly. The results in Table 4.11 to Table 4.15 show the effect generated by each dimension and are discussed in the next sub-sections.

a) The moderating effect of job resources between job demands and job burnout (H3)

Before checking the moderating role that can be played by the JR' dimension, the moderating function of overall JR between JD and burnout was evaluated. From Table 4.11, JR did moderate the relationship between JD and burnout significantly ($\beta = -0.3, p < 0.000$). As such, the result supports H3.

Table 4.11: Testing the Moderating Effects of Job Resources between Job Demands and Job Burnout

Hypotheses	Structural path	Path Coefficient		S.E	C.R
		Standardized	Unstandardized		
H3	ZJD-ZB	0.06*	0.06	0.064	0.947
	ZJR-ZB	0.446***	0.446	0.065	6.828
	ZJR x ZJD-ZB	-0.3***	-0.19	0.028	-6.907

Where

ZJD: Z-score of Job Demands;

ZJR: Z-score of Job Resources;

ZB: Z-score of Burnout;

* p < 0.05 ** p < 0.001 ***p < 0.000

The statistical result of the direct relationship between JD and burnout is shown earlier in Table 4.10 and the moderating effect of JR on the relationship between JD and burnout is interesting (see Table 4.11). If the respondents were not considering the effect of JR, the direct effect of JD on burnout was positively significant. In other words, when the dispatch workers were given heavier workload (depicted by JD variable), they tended to experience burnout.

However, when the respondents were given more JR (such as increasing the worker's knowledge through training or getting support from supervisor and co-workers), the dispatch workers would feel less susceptible to burnout (such as feeling exhausted) although heavy workload (depicted by JD variable) were assigned to them. The moderating effect of JR on the relationship between JD and burnout which is depicted by H3, therefore is supported.

The negative regression coefficient which is denoted by the structural path of ZJR x ZJD-ZB (-0.3) indicates JR could weaken the negative impact of JD on burnout. The result is consistent to the findings highlighted in Bakker (2015), Smoktunowicz et

al. (2015) and Trépanier et al.'s (2014) studies. As shown in Figure 4.5, dispatch workers with low level of JR are more likely to experience burnout in high and low job demands environment. However, dispatch workers with high level of JR are less likely to experience burnout in high JD as compared to low JD working environment.

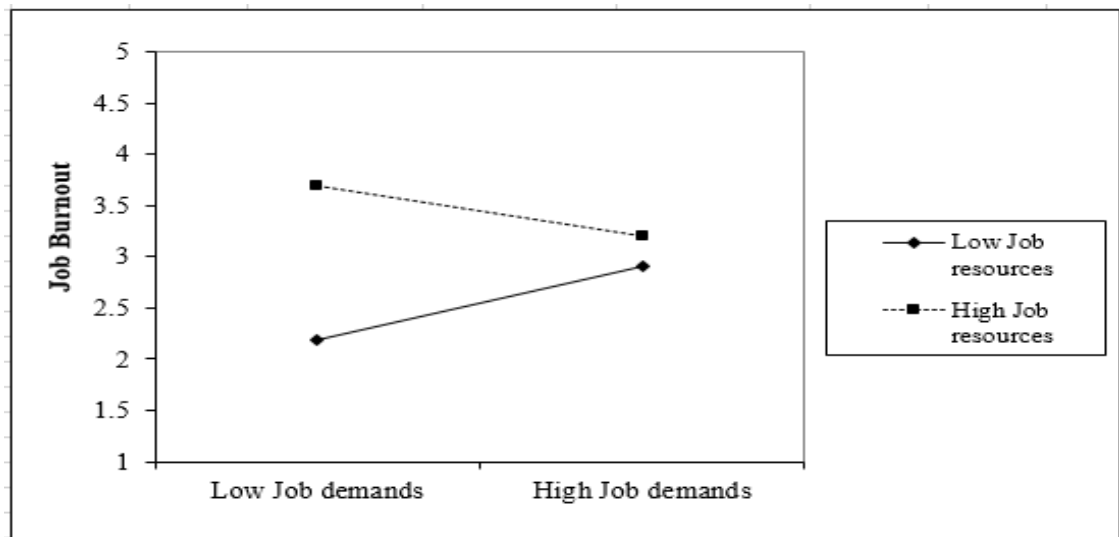


Figure 4.5: Moderation effect of job resources on relationship between job demands and job burnout

The moderating role that plays by JR in between JD and burnout are segregated into four sub-hypotheses. This is to measure the moderating effect that has been generated by each of the JR' dimensions: decision latitude and social support. The details are discussed in the following sub-sections.

b) The moderating effect of decision latitude between physical demands and job burnout (H3a)

This hypothesis is meant to measure the moderating effect generated by decision latitude (one of the JR' dimension) on the relationship between physical demands

(one of the JD' dimension) and burnout. The result shows that decision latitude can significantly moderate the relationship between physical demands and burnout ($\beta = -0.283, p < 0.000$). The negative regression coefficient (see Table 4.12) shows that the moderating variable (decision latitude) has weakened the negative effect of the physical demands on burnout. In brief, the statistical result has supported hypothesis H3a. This result is in line with the earlier findings suggested by Bakker (2015), Smoktunowicz et al. (2015) and Trépanier et al. (2014).

Table 4.12: Testing the Moderating Effects of Decision Latitude on Physical Demands and Job Burnout

Hypotheses	Structural path	Path Coefficient		S.E	C.R
		Standardized	Unstandardized		
H3a	ZPhyD-ZB	0.228***	0.228	0.057	3.997
	ZDL-ZB	0.288***	0.288	0.057	5.043
	ZDL x ZPhyD-ZB	-0.283***	-0.177	0.029	-6.077

Where

ZPhyD: Z-score of Physical Demands;

ZDL: Z-score of Decision Latitude;

ZB: Z-score of Burnout;

* $p < 0.05$ ** $p < 0.001$ *** $p < 0.000$

Earlier analysis as shown in Table 4.10 demonstrated that physical demands have influencing burnout positively. This implies that when the dispatch workers was required to perform more physical work (such as giving them more heavy workload), they felt burnout (such as feeling more exhausted). However, when the workers were given resources that are related to decision latitude (such as introducing a computer system that can allow the worker to design their work scope in repetitive manner), the respondents had become less susceptible towards the demand of more physical work and this had reduced their feeling of being burnout.

Figure 4.6 shows that dispatch workers with low level of decision latitude were more likely to experience burnout in high and low physical demands environment. Contrary, dispatch workers with high level of JR were less likely to experience burnout in high physical demands compared to low physical demands environment.

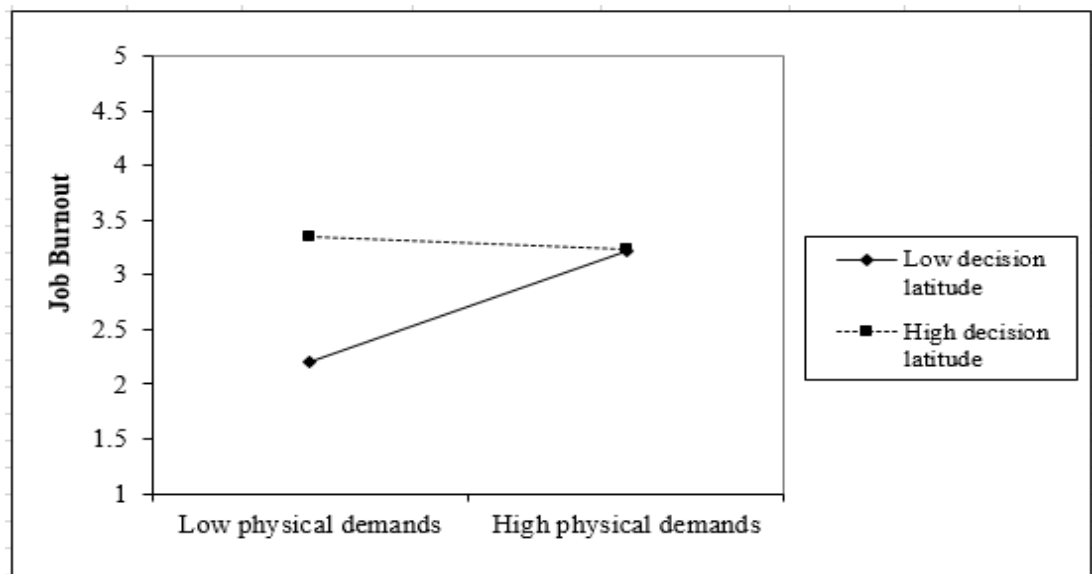


Figure 4.6: Moderation effect of decision latitude on relationship between physical demands and job burnout

c) The moderating effect of social support between physical demands and job burnout (H3b)

The result shows that social support had moderated the relationship between physical demands and job burnout significantly ($\beta = -0.328, p < 0.000$). The negative regression coefficient (see Table 4.13) denotes that social support had reduced the adverse effect of physical demand on job burnout. Hence, hypothesis H3b is supported. The finding is consistent with Bakker (2015), Smoktunowicz et al. (2015) and Trépanier et al.'s (2014) study result.

Earlier analysis as presented in Table 4.10 shows that there is a positive and significant direct effect between physical demands and burnout. In other words, higher physical demands (such as the need to work longer hours) had led to burnout. However, when the respondents perceived that their supervisor and co-worker were giving social support, the workers had become less susceptible towards the need to perform more physical work, which in turn, had diminished the feeling of burnout.

Table 4.13: Testing the Moderating Effects of Social Supports between Physical Demands and Job Burnout

Hypotheses	Structural path	Path Coefficient		S.E	C.R
		Standardized	Unstandardized		
H3b	ZPhyD-ZB	0.179*	0.179	0.057	3.139
	ZSoS-ZB	0.313***	0.313	0.058	5.407
	ZSoS x ZPhyD-ZB	-0.328***	-0.212	0.029	-7.183

Where

ZPhy: Z-score of Physical Demands;

ZSoS: Z-score of Social Support;

ZB: Z-score of Burnout;

* p < 0.05 ** p < 0.001 ***p < 0.000

Figure 4.7 shows that dispatch workers with low level of social support were more likely to experience burnout in high and low physical demands environment. On the other hand, dispatch workers with high level of social support were less likely to experience burnout in high physical demands compared to low physical demands environment.

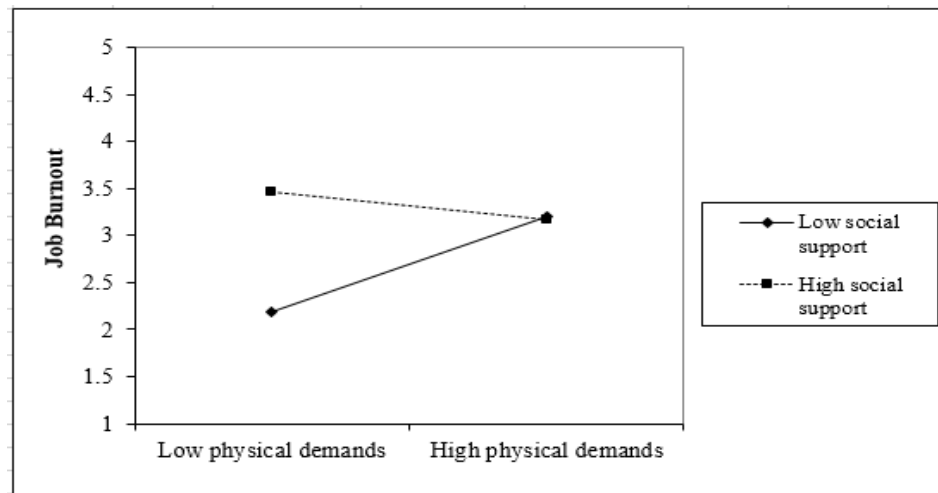


Figure 4.7: Moderation effect of social support on relationship between physical demands and job burnout

d) The moderating effect of decision latitude between psychological demands and job burnout (H3c)

The SEM result shown in Table 4.14, support hypothesis H3c, which predicts that decision latitude can moderate the relationship between psychological demands and burnout ($\beta = -0.263$, $p < 0.000$). The result indicates that when the respondents perceived higher decision latitude (such as provision of training that could increase the dispatch worker’s creativity skill) has been given to them, their negative psychological feeling had faded which in turn had diminished the burnout feeling as well.

Table 4.14: Testing the Moderating Effects of Decision Latitude between Psychological Demands on Job Demands on Job Burnout

Hypotheses	Structural path	Path Coefficient		S.E	C.R
		Standardized	Unstandardized		
H3c	ZPsD-ZB	0.057*	0.057	0.056	1.022
	ZDL-ZB	0.458***	0.458	0.057	8.067
	ZDL x ZPsD-ZB	-0.263***	-0.183	0.03	-6.014

Where

ZPsD: Z-score of Psychological Demands;

ZDL: Z-score of Decision Latitude;

ZB: Z-score of Burnout;

* $p < 0.05$ ** $p < 0.001$ *** $p < 0.000$

Note from Figure 4.8, the regression coefficient that is measuring the decision latitude's moderating effect in between psychological demands and burnout is negative. This implies that the dimension of decision latitude had weakened the negative effect created by psychological demands on burnout. This result fits well with the findings of Bakker (2015), Smoktunowicz et al. (2015) and Trépanier et al. (2014).

In details, Figure 4.8 shows that dispatch workers with low level of decision latitude were more likely to experience burnout in high and low psychological demands environment. Meanwhile, dispatch workers with high level of decision latitude were less likely to experience burnout in high psychological demands compared to low psychological demands environment.

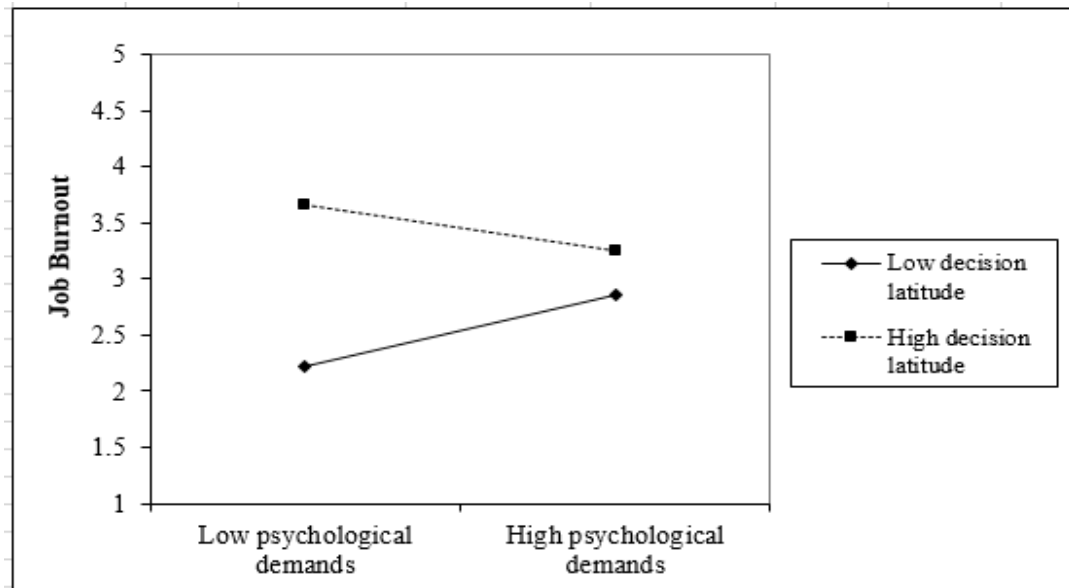


Figure 4.8: Moderation effect of decision latitude on relationship between psychological demands and job burnout

e) The moderating effect of social support between psychological demands and job burnout (H3d)

The support of H3d denotes that social support can moderate the effect of psychological demands on burnout at precision level of 0.05 (see table 4.15; $\beta = -0.269$, $p < 0.000$). The negative regression coefficient of social support's moderating effect shows that social support (by supervisor or co-worker) which was received by the dispatch workers had diminished the workers' negative feeling towards the negative effect of psychological demands such as the feeling of not having enough time to perform certain work task. As a result, the workers' burnout feeling had diminished too. This finding is consistent with the results from past surveys that involved employees from various occupational fields (Bakker, 2015; Smoktunowicz et al., 2015; Trépanier et al. 2014).

Table 4.15: Testing the Moderating Effects of Social Supports on the relationship between Psychological Demands and Job Burnout

Hypotheses	Structural path	Path Coefficient		S.E	C.R
		Standardized	Unstandardized		
H3d	ZPsD-ZB	0.01*	0.01	0.056	0.185
	ZSoS-ZB	0.508***	0.508	0.058	8.83
	ZSoS x ZPsD-ZB	-0.269***	-0.189	0.3	-6.274

Where

ZPsD: Z-score of Psychological Demands;

ZSoS: Z-score of Social Support;

ZB: Z-score of Burnout;

* p < 0.05 ** p < 0.001 ***p < 0.000

As evidence in figure 4.9, dispatch workers with low level of social support were more likely to experience burnout in high and low psychological demands environment. Relatively, dispatch workers with high level of social support were less likely to experience burnout in high psychological demands compared to low psychological demands environment.

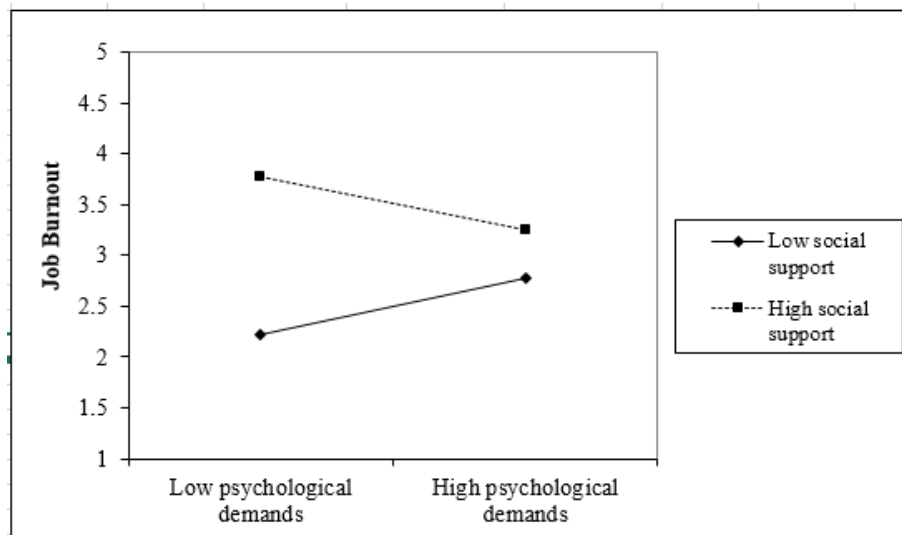


Figure 4.9: Moderation effect of social support on relationship between psychological demands and job burnout

4.6 Summary of Results

Overall, the analysis presents that: (1) JD and one of its dimension: physical demands have significant direct and positive effect on burnout; (2) JR one of its dimension: social support can affect the dispatch worker's WE; (3) CV and both of its dimensions, employee who valued corporate volunteerism and understand the motive of corporate volunteerism have significant direct and positive effect on WE. However, the results also indicate that (1) psychological demands (a dimension of JD) and decision latitude (a dimension of JR) may not be able to influence the feelings of being burnout and WE respectively.

In addition, the dimensions of JR: decision latitudes and social support can moderate the dispatch workers from being burnout when (1) excessive jobs that required physical contribution is given to them; and (2) the psychological elements as perceived by the respondents such as the need to work harder is escalating. Generally, JR is playing an important moderating role in reducing the respondent's feeling of being burnout as a result of increasing on JD. The summary of the confirmation of hypotheses is shown in Table 4.16.

Table 4.16: Summary of the Confirmation of Current Hypotheses

	Hypothesis	Remarks
H1	Job demands positively relate to job burnout.	Supported
H1a	Physical demands positively relate to job burnout.	Supported
H1b	Psychological demands positively relate to job burnout.	Not supported
H2	Job resources positively relate to work engagement.	Supported
H2a	Decision latitudes positively relate to work engagement.	Not supported
H2b	Social supports positively relate to work engagement.	Supported
H4	Corporate volunteerism positively relates to work engagement.	Supported
H4a	Dispatch workers who valued the corporate volunteerism undertaken by their employers will positively relate to their work engagement	Supported
H4b	Dispatch workers who understand the motive of corporate volunteerism undertaken by their employers will positively relate to their work engagement	Supported
H3	Job resources of employees will moderate the effect between job demands and job burnout.	Supported
H3a	Decision latitudes will moderates the relationship between physical demands and job burnout.	Supported
H3b	Social support will moderates the relationship between physical demands and job burnout.	Supported
H3c	Decision latitudes will moderates the relationship between psychological demands and job burnout.	Supported
H3d	Social support will moderates the relationship between psychological demands and job burnout.	Supported

CHAPTER 5

CONCLUSION AND IMPLICATIONS

5.1 Introduction

This chapter will provide a brief summary of the study; information on accomplishment of research objective, the implications of the findings to academics and policy makers. Finally, a conclusion may also include limitations of the study and recommendations for the future research needs.

5.2 Accomplishment of Research Objectives

This study aims to test the viability of current research model – that integrates the JD-R model and theory of social exchange – in explaining courier’s dispatch workers’ reaction towards JD, JR, CV, burnout, and WE.

Three specific objectives were established. First, to evaluate the direct effect created by JD and its two dimensions: physical demands and psychological demands on burnout, three hypotheses: H1, H1a and H1b were developed and examined. The result shows that the JD construct and one of the construct’s dimension, physical demands can influence the worker’s burnout feeling positively and is consistent with many past studies.

Another dimension of the physical demands construct: psychological demands could not create significant direct effect on burnout. Inconsistent response towards the effect that can be generated by psychological demands on burnout may have

caused the statistical result to be non-significant. For example, the numbers of respondents who feel that excessive psychological demands such as the need to work hard may cause them to feel being burnout versus to those who may treat such requirement as motivation was not widely differ. Such discrepancy may have cause the hypothesis (H1b) to be not supported.

Secondly, to assess the JR construct and its two dimensions: decision latitude and social support's (1) direct effect on WE, three direct relationship hypotheses: H2, H2a and H2b were examined; and (2) moderating effect between JD and burnout, five moderation hypotheses: H3, H3a, H3b, H3c and H3d were formulated and assessed.

The results of that were testing the direct effect relationship show that the JR construct (denoted in H2) and one of the dimensions, social support (reflected in H2b) can influence the worker's WE positively. The result shows that courier dispatch workers did appreciate the social support that they have received from supervisor and co-worker and such support did reduce the worker's burnout feeling.

Hypothesis H2a (related to decision latitudes) however is not supported at precision level of 0.05. Decision latitudes was measured by the following sub-dimensions: skill discretion and decision authority. Due the worker's low designation job position, some dispatch workers felt that the award of work discretion (or opportunity to decide how their job tasks can be carried out) by company is not necessary and therefore the skill discretion dimension did not play a significant role

in influencing the worker's burnout perception. However, there were respondents who felt that the lacking of certain skill discretion element such as the right to choose what should be done to complete the work task, the burnout feeling arise. Such inconsistency behavior may have causes non-significant result. The same inconsistent behavior applies in measuring the effect that can be generated by decision authority.

The support of the moderation hypotheses: H3, H3a, H3b, H3c and H3d show that job resources and its two dimensions are playing significant roles in moderating the effects created by JD on burnout. Interestingly, even though decision latitudes (a dimension of JR) did not create a direct significant effect on burnout, the dimension can moderate the effect created by JD on burnout significantly. In other words, if the workers were given more resources elements that are related to decision latitudes such as the provision of training to enhance their knowledge, the negative effect that was generated by JD and its dimensions on burnout will be reduced. The same explanation applies to social support (another dimension of JR) that was received by dispatch workers from supervisor and co-workers.

Thirdly, to appraise the direct effect of CV construct and its two dimensions on dispatch workers' WE, three hypotheses: H4, H4a and H4b were hypothesized to have direct and positive effects. The result shows that dispatch workers who valued CV activities and understand the motive of undertaking the CV activity will have significant direct and positive effects on WE. The support of the three hypotheses show that dispatch workers agreed that CV activities should be carried out by their

employers and this can motivate them to be more engaged in work.

Overall, it is evidently to conclude that all research objectives have been achieved successfully and the findings could provide useful indications to policy makers to plan and strategize policies that can minimize the dispatch worker or other blue collar workers' burnout and increase their WE.

5.3 Implications

5.3.1 Implications for Academia

Literature shows that understanding and assessing the root causes that may lead the respondents' to feel burnout or be more engaged or disengaged in work are important and the outcomes can determine a corporate's sustainability. Many studies of such research area have been carried out but most were concentrated on white collar workers. In some studies that were investigating white collar workers, psychological demands (a dimension of job demands) and decision latitudes (a dimension of job resources) were significantly related to burnout and work engagement (Akkerman et al., 2013; Guglielmi et al., 2012; Kinnuren et al., 2011; Schaufeli & Taris, 2014).

The study result however is contradict to the past studies' result mentioned above and this support De Spiegelaere et al., (2012) and Schaufeli and Taris (2014), suggestion that blue collar and white collar workers may reacts differently towards JD, JR, burnout and WE. The propositions of JD-R model and SET therefore maybe arguable if the respondents' job nature and job designation is different.

Overall, the results that support the theories' propositions may be able or not able to generalize different types of study population. More research on blue collar and low designated workers should be carried out so that the results can be compared and more specific conclusion can be established. In this way, the viability of specific dimensions of the JD-R model and social exchange theory on specific categories of workers can be generalized.

In addition, more studies should be carried out to enrich the existing theoretical knowledge about burnout and WE so that scholars can start to explore and test the viability of other related variables. This is useful when the exogenous factors have changed.

This study also has also provided empirical evidences on the direct effect of CV on WE, particularly among blue collar workers. In literature related to CV, past researchers (Jie & Hasan, 2016) asserted that the Malaysian government has not been providing adequate support for the implementation of CV of today's diverse workforce. Therefore, this study adds to the existing body of knowledge on the need to incorporate more CV activities if the company intends to improve blue collar workers' work engagement.

5.3.2 Implications for Policy Makers

The results of this study can enrich the body of knowledge on burnout and WE especially when a specific dimension (decision latitude or social support) of the moderating variable (JR) did not generate a direct effect to a variable but can moderate the effect of a variable on another variable. For example, hypothesis H2a was not supported, or this study did not gather sufficient information to show that the decision latitudes construct is positively relate to WE.

To elaborate, the number of respondents that viewed the importance of performing repetitive work (an item of decision latitudes variable) compared to those that were giving contradict response are not widely different. Therefore, it may not be wise for company to design repetitive work assignment to workers, if the management plans to improve overall worker's work engagement.

Nevertheless, decision latitude has moderated the relationships between the dimensions of the JD (physical and psychological demands) and burnout (refer to H3a and H3c). The result implies that when the dispatch workers was required to perform more physical work (such as giving them more heavy workload), they felt burnout (such as feeling more exhausted). However, when the workers were given resources that are related to decision latitude (such as introducing a computer system that can allow the worker to design their work scope in repetitive manner), the respondents had become less susceptible towards the demand of more physical work and this had reduced their feeling of being burnout.

In summary, the effectiveness of the provision of decision latitude's element to workers depends on the company management's objective. When the workers were given higher physical workload in specific time period, decision latitude will work in reducing burnout. However, during normal working circumstances, decision latitude will not be able to enhance the worker's work engagement.

Overall, the integration of the frameworks of theories of JD-R model (that measure the impact of JD and JR on burnout and WE) and social exchange (that estimate the effect of corporate volunteerism on work engagement) in this study has managed to provide more holistic recommendations for higher officials to address the issues related to job burnout and WE in the workplace (refer to Table 5.1 for summarized practical implications).

Particularly, current study's empirical results can provides useful indications to policy maker on how (1) JD and physical demands can affect the dispatch workers' burnout; and (2) JR, social support, CV and, workers who valued and understand the motive of CV undertaken by their employers can boost the dispatch workers' engagement in work.

To decrease the incident of burnout, policy makers should design appropriate levels of JD and physical demands. For example, heavy workloads and the possibility of requiring the workers to work for long hours could be reduced by the following ways. The workloads among the dispatch workers should be fairly distributed; and flexible working hours or appropriate working shift arrangement should be

implemented. On top of that, the daily work performance goals should be communicated clearly to dispatch workers at the beginning of the working day. This may be able to reduce the workers from experiencing awkward feeling.

This study hypothesized that JR could create direct effect on WE and moderating effect in between JD and burnout. Current study's result shows that the dimension of JR: social supports can affect WE significantly while another dimension of job resources: decision latitudes has no significant effect. From the result, supervisors or managers support are therefore playing important roles on encouraging the dispatch workers to engage in their work. Compassionate support such as helpful and giving attention to the workers, and ability to interact with the dispatch workers should be useful if the company's management plans to increase the worker's WE.

To moderate the relationship between JD and job burnout, both dimensions of JRs: decision latitude and social support are statistically significant. As it is possible that higher job demands may need to be assigned to dispatch workers especially during unforeseen peak delivery season, employers therefore need to plan the decision latitude's perspectives carefully in order to lessen the worker's feelings of being burnout. For example, trainings should be provided to increase the dispatch workers' knowledge or special abilities; or to craft the worker's creativity talent that may improve their work performance. In addition, dispatch worker must be properly equipped with functional equipment or tool to lessen the workers' physical effort.

Since social supports would positively influence dispatch worker's work engagement, employers can initiate and form counselling session like buddy system in workplace, where workers can consult the supervisor or seniority staff whenever they need assistant or someone to talk to when they are struggling to complete higher demand's task.

To lessen the negative effect generated by psychological demands on burnout, decision latitude (a dimension JR) and enhancing social support (another dimension of JR) are playing important moderating roles as well. When the workers feel that they were given certain level of decision latitude or receiving social support, the negative feelings that derived from excessive psychological effect can be decreased and this will in turn reduce the burnout. For example, allow the workers to plan their working schedule; provide a channel where the dispatch workers could siphon the customers' positive or negative comments to higher level management; and encourage the dispatch workers to socialize and to communicate with managers/supervisors and first-line employees.

Similar to many past studies that have support the positive effect that can be created by the implementation of corporate volunteerism activity on work engagement; this study is supporting the hypothesis as well. In other words, the involvement in community and social responsibility among the dispatch workers could motivate the workers to have a better sense of belonging in the workplace which will in turn increase their engagement in work.

Companies that promote continual corporate volunteer programmes will be able to improve or increase the corporate reputation which can determine the corporate's sustainability. Implementing corporate volunteerism can also help the employees to develop a healthier mind set or nurture the sense of feeling good when certain community can live better and improve the betterment of specific community.

Corporate volunteerism can be undertaken by partnering with non-profits organizations if the organizations can help the company to organize the activity systematically and efficiently, for example siphoning aids to flood disaster victims. However, giving the company's product voucher to the needies could reduce the worker's trust if they perceived that such action is meant for the company to clear stocks or increase publicity or generate higher sales turnover. On top of that, employers should practice 'employee ownership' in corporate volunteerism planning, in which the dispatch workers are encouraged to coordinate regular corporate volunteerism projects.

Table 5.1: Summary of Implication for Practices

No	Major findings	Suggestions for policy implication
1.	Job demands positively relate to job burnout.	<p>Ensure that performance goals are communicate clearly to employees at the beginning of the working day. This can ensure fair distribution of job responsibilities.</p> <p>Train supervisors or managers on how to keep employees engaged and motivated. This is because supervisors/managers have the direct authority in controlling the employees' workload.</p>
2.	Physical demands positively relate to job burnout.	<p>Practice flexible scheduling, allow employees to come in at their most productive time. This can ensure employees get enough rest before they start their next working day.</p> <p>Restrict overtime to days off on 12-hour schedules. Employee should not work more than one additional shift per week and two additional shifts per month.</p>
3.	Job resources positively relate to work engagement.	Reconfiguring company bonus schemes, to recognize improvements in employee engagement and customer satisfaction
4.	Social supports positively relate to work engagement.	Implement a buddy system in workplace. It can ensure new and senior employees have someone to talk to when they struggling. This might let employers know the task given to employees requires extra help or not.
5.	Corporate volunteerism positively relates to work engagement.	<p>Create a culture of social responsibility by partnering with local non-profits and allowing corporate volunteerism days where employees will still get paid for their volunteer time.</p> <p>Establish worker involvement programme. Involvement in community and social responsibility to ensure employees can have a sense of belonging in the workplace which leads to more than just good vibes and friendships.</p>
6.	Dispatch workers who valued the corporate volunteerism undertaken by their employers will positively relate to their work engagement	Set time aside. Encourage each employees to spend approximately 10% of their weekly working time to focus in corporate philanthropy and coming up with corporate volunteerism ideas they believe in.
7.	Dispatch workers who understand the motive of corporate volunteerism undertaken by their employers will positively relate to their work engagement	Allowing employee ownership of corporate volunteerism planning. Providing opportunity to employee to involve in the planning process and seek out employees who want to coordinate regular corporate volunteerism projects.

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No	Major findings	Suggestions for policy implication
8.	Job resources of employees will moderate the effect between job demands and job burnout.	<p>Allow employees to spend some of their working time on a work-related side project that they feel passionate about.</p> <p>Employees must be properly equipped with functional equipment or tool. Frustration with equipment can be the causes of burnout, and providing functional equipment can alleviate work-related stressors.</p>
9.	Decision latitudes will moderate the relationship between physical demands and job burnout.	Involving each employee to plan and create working schedule. This might enable them to make their voice heard.
10.	Social support will moderate the relationship between physical demands and job burnout.	Ensure that being supportive is a company value. Reward employees who exemplify supportive culture.
11.	Decision latitudes will partially moderates the relationship between psychological demands and employee's burnout	Allow each employee to make company decisions. They might have great insights about customers. Let them feel a sense of ownership in the process.
12.	Social support will partially moderates the relationship between psychological demands and employee's burnout	<p>Encourage socializing among the working team. Organizing team lunches and allowing each employees to freely socialize.</p> <p>Open consistent lines of communication between managers/supervisors and first-line employees to ensure that managers have spent time listening to and addressing employees' concerns.</p>

5.4 Research Limitations

Just like any other research, the study has its limitations that should be addressed in the future research. First, the result of current study shows that the respondents have given inconsistent reaction towards the relationships between psychological demands and job burnout, which contradict with past studies. Some dispatch workers may feel that when they were experiencing psychological demands, they would mentally feel burnout in job, whereas another group of dispatch workers may

react contrary or maybe motivated to work harder. Such discrepancy of response towards the effect that created by psychological demands on job burnout among dispatch workers therefore has limited the ability of the result to be generalised.

Secondly, many past studies have confirmed the sub-dimension of decision authority can measure the decision latitudes dimension construct (see Table 3.1). The decision authority construct was measured by the following items – freedom, decision making, and opinion (see Table 3.1). However, the dimension construct was removed due to poor convergent validity. Probably, having the freedom to express opinion and the authority to make decision is perceived as less importance when the workers are less educated. As a result, the decision latitudes dimension construct was measured only by one sub-dimension: skill discretion in this study.

Nevertheless, consensual agreement towards the items (with factor loading score above the threshold value) that were used to measure the skill discretion sub-dimension construct – knowledge, special abilities, variety of things, and repetitive work was not obtained in this study. As a result the hypothesis H2a was not supported or the effect of decision latitudes on WE cannot be generalised to the population.

5.5 Recommendation for Future Studies

The following recommendations are suggested to overcome the research limitations. Reasons that have caused the discrepancy of responses towards the measuring items should be investigated in future research.

The first limitation highlights the problem in obtaining consensus response towards the measuring items of psychological demands construct: ‘not enough time to perform the work’, ‘excessive work time is frequently needed’, ‘need to work faster’, ‘this is a busy job’, ‘have to perform another job’, and ‘need to wait for other workers to complete the prior tasks before the respondent can perform own task’. In this study, a group of respondents had given negative response on a specific measuring item while another group of respondents had given positive response. Further research therefore is suggested to study in-depth on why studied respondents have provided such discrepancy response. The outcome of the research could be useful to identify the similar characters of the groups that behave differently. In this way, a more strategic planning can be planned to overcome the negative reaction and motivate those gave positive response.

In brief, the second limitation highlights the problem related to the dimension of JR: decision latitudes. Despite literature suggested the dimension construct can be measured by two sub-dimensions (skill discretion and decision authority), the latter sub-dimension: decision authority was removed due to poor convergent validity. As companies operated in Malaysia are required to allocate a specific sum of fund (namely human resources development fund) for staff development purpose, courier service companies may be willing to provide more vocational training that can sharpen the dispatch workers’ working skills. After all, the dispatch workers are the front liner staffs of the company. Therefore, future researchers should not assume that the sub-dimension of decision authority may not be applicable for low level management staff. Strong justification should be provided if the decision

authority construct is removed in future study.

The following discussion is related to the other sub-dimension construct: skill discretion. Two measuring items (creativity and affectiveness) were removed from the skill discretion construct due to poor factor loading scores. Similar to the argument presented for decision authority construct above, the two items of creativity and affectiveness could be valid in future, when the dispatch workers are getting more educated.

According to Nielsen Smartphone Insights (2014) as reported in Digital Integration and Business Transformation Asia Conference (2016), smartphone penetration in Malaysia is 80%, which is just slightly below Hong Kong and Singapore that had achieved the highest smartphone penetration in the world (87%) (cited in Siti Syuhada Abd Rahman et al. 2017). In other words, the dispatch workers' working knowledge will improve when more smart applications related to courier dispatch are available in future. At this juncture, creativity and affectiveness could be important measures to the dispatch workers.

In summary, the hypothesis that predicts the effect of decision latitudes on WE may be valid in future if the removed sub-dimension construct (decision authority) and/or measuring items of skill discretion construct become valid in future. Future researchers therefore should not remove the sub-dimension construct (decision authority) and/or measuring items of skill discretion construct by citing the result of this study.

5.6 Conclusion

This study has three specific objectives and each objective has its own hypotheses. To accomplish the first objective, three hypotheses were formed. The result shows that job demands (reflected by H1), in particular physical demands related to burnout positively (reflected by H1a) and is consistent with many past studies. To decrease the incident of burnout among the dispatch workers, policy makers should design appropriate levels of job demands and physical demands. The workloads should be fairly distributed; and flexible working hours or appropriate working shift arrangement should be implemented. This may reduce the workers from experiencing awkward feeling.

The psychological demands however did not create significant direct effect on burnout (reflected by H1b) which is inconsistent to past studies which were surveying white-collar workers. Blue-collar workers may react differently on the dimensions of job demands and job resources compared to white collar workers. Therefore, the propositions of JD-R model maybe arguable if the respondents' job nature and job designation is different.

All the hypotheses of the second objective are supported except one hypothesis. Hypothesis H2a is not supported because one of the job resources' dimensions, decision latitudes did not create significant effect on WE at precision level at 0.05. Possibly this is caused by the removal of one sub-dimension of decision latitude (decision authority) and failure to obtain a concrete direction (positive or negative)

of the response towards the measuring items of skill discretion construct (another sub-dimension of decision latitude).

Although decision latitudes did not affect WE significantly (related to H2a), the dimension construct has moderated the effect of physical demands on job burnout (as predicted by H3a). Dispatch workers consensually agreed that if they are given certain level of decision latitudes element such as obtaining certain level of job discretion to carry out their job, they would feel less burnout when additional physical demands are given to them. Therefore, training and/or coaching should be provided to increase the dispatch workers' knowledge and/or special abilities.

As supports from supervisor and co-workers related to WE significantly (related to H2b) and has moderated the effect of physical demands on job burnout (as predicted by H3b), employers can initiate and form counselling session like buddy system in workplace so that workers can consult the supervisor or seniority staff whenever they need counselling or other assistance. Such strategies can increase the WE and at the same time, reduce the negative effect of higher physical demands on job burnout.

To lessen the negative effect generated by psychological demands on burnout, decision latitude and social support are playing important moderating roles (as predicted by H3c and H3d). When workers are disturbed with specific level of psychological demands (such as feeling the need to perform their job faster and faster); the following strategies are applicable – allowing workers to plan their

working schedule; providing a channel for dispatch workers to siphon the customers' positive or negative comments to higher level management; and encouraging the workers to socialize and communicate with managers or supervisors or first-line employees.

The third objective that relates the CV and WE was accomplished by confirming the results of three hypotheses (H4, H4a, and H4b). The result shows that overall CV is positively related to WE (reflected by H4); particularly the dispatch workers appreciated the corporate volunteering activities (as predicted by H4a) and understood the motive of activities (as predicted by H4b). The dispatch workers were motivated to have a better sense of workplace belonging if they are given the opportunity to participate in corporate volunteering activities. The government therefore should encourage courier companies to take part in corporate volunteering activities as such actions can create win-win situation to the internal and external stakeholders. On top of that, employers could practice 'employee ownership' in corporate volunteerism planning, in which the dispatch workers are encouraged to coordinate regular corporate volunteerism projects.

Inconsistent response towards the effect of psychological demands on burnout, which contradict to past studies' results is a limitation of this study. Further research therefore is suggested to study in-depth on why studied respondents have provided such discrepancy response. The second limitation is related to the remove of a sub-dimension: decision authority and two measuring items of another sub-dimension:

skill discretion from the decision latitudes dimension due to poor convergent validity and factor loading scores respectively. Future researchers are suggested to study in-depth on why studied respondents have provided discrepancy response towards the measuring items of psychological demands, decision authority, and skill discretion constructs.

Finally to conclude the study, the integration of JD-R model (that measure the impact of JD and JR on burnout and WE) and social exchange theory (that estimate the effect of CV on WE) indeed has provided comprehensive results that are very useful to courier service company's management team to minimize the dispatch worker's burnout and increase their WE.

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Appendix A

Serial Number: _____



**Faculty of Business and Finance
Universiti Tunku Abdul Rahman (UTAR)
KAMPAR CAMPUS**

Dear Respondent,

This research aims to investigate the factors that could minimize job burnout and maximize work engagement among employees within Malaysian courier service organizations. There are no correct or incorrect responses in the survey and your views are important, regardless of their nature. Your response will keep strictly confidential, only members of the research team will have access to the information you contribute. The information collected would be used for academic research purposes only. Thank you very much for your time and cooperation. I greatly appreciate your help in furthering this research endeavour.

Yours sincerely,
Kong Hoi Yoon
generalkong12@gmail.com
Contact Number: 016-5419775
Candidate of Master of Philosophy
Universiti Tunku Abdul Rahman (KAMPAR CAMPUS)

If you have any questions about your rights as a human subject, complaints and concerns, please contact the Institute of Postgraduate Studies and Research in Universiti Tunku Abdul Rahman (Kampar campus) at 605-4688888, extension 2229.

Section A: Working Condition

For each of the statements, please **tick (✓)** the number using the following scales which you feel the best to describe your working condition.

1 (Strongly disagree)	2 (Disagree)	3 (Agree)	4 (Strongly agree)
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	<i>Statement Item</i>	<i>Scale Numbers</i>			
Job Demands					
<i>Psychological Demands</i>					
1.	Quite often, I don't have enough time to complete my daily work.	1	2	3	4
2.	Quite often, I am asked to do an excessive amount of work.	1	2	3	4
3.	I need to work fast to complete my job on time.	1	2	3	4
4.	Sometimes, I have some disagreement with my co-workers.	1	2	3	4
5.	I am always busy on my job.	1	2	3	4
6.	Before completing a job task, I was frequently asked to perform another task.	1	2	3	4
7.	Quite often, I couldn't complete my work on time if part of the work needs to be completed by other workers first.	1	2	3	4
<i>Physical Demands</i>					
1.	My job requires me to put in lots of physical effort.	1	2	3	4
2.	Frequently, I was given heavy workload.	1	2	3	4
3.	Frequently, I need to work for longer hours to complete my daily task.	1	2	3	4
4.	Sometimes, there are some job tasks which are difficult to handle.	1	2	3	4
Job Resources					
<i>Decision Latitude: Skill Discretion</i>					
1.	I have the knowledge to perform my task effectively.	1	2	3	4
2.	I have special abilities/ competencies that can allow me to perform my work better.	1	2	3	4
3.	I can do variety of things that are related to my job.	1	2	3	4
4.	I can do repetitive work without much problem.	1	2	3	4
<i>Decision Latitude: Decision Authority</i>					
1.	My superior has given me some freedom to complete certain task.	1	2	3	4
2.	I am allowed to make my own decision as long as I can complete the work without causing problem to other workers or customers.	1	2	3	4
3.	I could voice out my opinions if I think it can improve my work.	1	2	3	4

	<p><i>Supervisor Support</i></p> <p>1. My supervisor is helpful in assisting the sub-ordinates to complete their work.</p> <p>2. My supervisor is concerned about his/her subordinate's work welfare such as safety.</p> <p>3. My supervisor is good in organizing his/her subordinates' workload.</p> <p>4. I don't have conflict with or unfriendly feelings toward my supervisor.</p>	1	2	3	4
	<p><i>Co-worker Support</i></p> <p>1. My co-workers are friendly.</p> <p>2. My co-workers are helpful.</p> <p>3. I don't have unfriendly feelings towards my co-workers.</p> <p>4. My co-workers and I could work together.</p>	1	2	3	4
	<p style="text-align: center;">Corporate Volunteerism</p> <p><i>Values</i></p> <p>1. I sympathise/ pity people who are less fortunate.</p> <p>2. I am genuinely concerned about certain community's welfare.</p> <p>3. I am willing to help those people who is sick or in trouble.</p> <p>4. I am willing to help certain community that needs help.</p> <p>5. I am willing to do something for certain community's welfare should that deserve more attention.</p>	1	2	3	4
	<p><i>Understanding</i></p> <p>If I can join the activities that are related to community welfare, ...</p> <p>1. my knowledge about social responsibility will increase.</p> <p>2. my understanding of the <i>meaning</i> of social responsibility will improve.</p> <p>3. I will be able to perform the social responsibility.</p> <p>4. I will be able to learn how to deal with a variety of people.</p> <p>5. I will be able to explore my own strengths.</p> <p>6. I will be able to materialise my intention to help certain community or preserving <i>something</i> that is important to future generation.</p>	1	2	3	4

For each of the statements, please **tick (✓)** the number using the following scales which you feel the best to describe your working condition.

1 (Never)	2 (Rarely)	3 (Sometimes)	4 (Always)
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	<i>Statement Item</i>	<i>Scale Numbers</i>			
	Work Engagement				
	<i>Vigor</i>				
1.	I feel strong and vigorous in doing my work.	1	2	3	4
2.	I feel like bursting with energy when I am doing my work.	1	2	3	4
3.	I will try to continue my work in spite of difficulties.	1	2	3	4
	<i>Dedication</i>				
1.	I love and appreciate the work that I am doing now.	1	2	3	4
2.	To me, my job is exciting.	1	2	3	4
3.	I am ready to do <i>something</i> or giving the management an idea about what could be possibly done in future.	1	2	3	4
4.	I am proud/ pleased of the work that I have done.	1	2	3	4
	<i>Absorption</i>				
1.	Time flies when I'm working.	1	2	3	4
2.	I am fully focused on my job.	1	2	3	4
3.	I feel happy when I am working intensely.	1	2	3	4
4.	I am immersed in my work.	1	2	3	4
5.	I get carried away when I'm working.	1	2	3	4
6.	It is difficult to detach myself from my job.	1	2	3	4
	Burnout				
	<i>Exhaustion</i>				
1.	I feel that my emotional or physical strength is drawing off/ drained gradually due to my work commitment.	1	2	3	4
2.	I feel tired when I get up in the morning and have to face another day on the job.	1	2	3	4
	<i>Cynicism</i>				
1.	Nowadays, I have become less interested in my work.	1	2	3	4
2.	I have become less enthusiastic/ keen about my work.	1	2	3	4
3.	I just want to do my job and don't want to be bothered by other people/ work.	1	2	3	4
4.	I have become more temperamental or emotionally sensitive during the working hours.	1	2	3	4
5.	I doubt my work performance is important.	1	2	3	4
	<i>Professional efficacy</i>				
1.	I can effectively solve the problems that arise in my work.	1	2	3	4

Nombor Siri : _____



**Fakulti Perniagaan & Kewangan
Universiti Tunku Abdul Rahman (UTAR)
KAMPUS KAMPAR**

Responden yang dihormati,

Penyelidikan ini bertujuan menyelidik faktor-faktor yang dapat mengurangkan bebanan kerja anda disamping dapat mengalakkan penglibatan pekerjaan di dalam organisasi perkhidmatan kurier di Malaysia. Tiada jawapan atau pernyataan yang betul atau salah dalam penyelidikan ini. Maklum balas anda akan dipelihara sebagai sulit. Hanya ahli-ahli pasukan penyelidikan ini mempunyai hak untuk menguji maklumat yang telah diperolehi. Maklumat yang dikumpul akan digunakan untuk tujuan penyelidikan akademik sahaja. Terima kasih atas kesudian untuk meluangkan masa dan kerjasama anda. Saya amat menghargai bantuan anda dalam usaha melanjutkan penyelidikan ini.

Yang benar,

Kong Hoi Yoon

generalkong12@gmail.com, nombor telefon: 016-5419775

Pelajar di peringkat Sarjana Falsafah, Universiti Tunku Abdul Rahman (KAMPAR CAMPUS)

Jika anda mempunyai sebarang kemusykilan atau pertanyaan, sila hubungi Institut Pengajian Siswazah dan Penyelidikan di Universiti Tunku Abdul Rahman, (kampus di Kampar, Perak) di talian 605-4688888, nombor sambungan 2229 .

Seksyen A: Situasi Kerja

Bagi setiap pernyataan berikut, sila **tandakan** (√) nombor skala yang dapat menggambarkan situasi kerja anda sekarang.

1 (Sangat Tidak Setuju)	2 (Tidak Setuju)	3 (Setuju)	4 (Sangat Setuju)
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	<i>Kenyataan</i>	<i>Skala Nombor</i>			
	Bebanan Pekerjaan				
	<i>Tuntutan Psikologi</i>				
1.	Seringkali, saya tidak dapat menyiapkan kerja harian saya akibat kesuntukan masa.	1	2	3	4
2.	Seringkali, saya perlu menyelesaikan kerja yang melampaui batas kerja seharian.	1	2	3	4
3.	Saya perlu bertugas dengan cepat supaya kelewatan kerja dapat dielakkan.	1	2	3	4
4.	Percanggahan pendapat sesama rakan sekerja kadang kala akan berlaku.	1	2	3	4
5.	Saya sentiasa sibuk dengan kerja saya.	1	2	3	4
6.	Sebelum dapat menyiapkan kerja saya, saya sering diminta melaksanakan tugas yang lain.	1	2	3	4
7.	Seringkali, saya tidak dapat menyiapkan kerja saya pada masa yang ditetapkan jika sebahagian dari kerja tersebut harus disempurnakan oleh perkerja lain terlebih dahulu.	1	2	3	4
	<i>Permintaan Fizikal</i>				
1.	Tugas yang diberikan kepada saya sering memerlukan penyumbangan tenaga fizikal yang tinggi.	1	2	3	4
2.	Seringkali, beban kerja saya adalah berat.	1	2	3	4
3.	Seringkali, saya perlu mengambil masa yang lama untuk menyiapkan kerja saya.	1	2	3	4
4.	Kadang kala, saya perlu menyempurnakan tugas yang sukar dikendalikan.	1	2	3	4
	Kejelasan Pekerjaan				
	<i>Latitud Keputusan: Budi Kemahiran</i>				
1.	Untuk menyempurnakan tugas saya, seseorang pekerja perlu memiliki kemahiran tertentu.	1	2	3	4
2.	Saya dapat menyempurnakan tugas saya dengan baik kerana saya mempunyai kebolehan atau kemahiran tersendiri.	1	2	3	4
3.	Saya dapat menyiapkan pelbagai kerja yang berkaitan dengan tugas saya.	1	2	3	4
4.	Saya boleh menyiapkan kerja yang berulang-ulang tanpa menghadapi banyak masalah.	1	2	3	4

	<i>Latitud Keputusan: Kuasa Keputusan</i>				
1.	Pihak atasan telah memberikan sedikit kebebasan kepada saya bagi menyelesaikan tugas tertentu.	1	2	3	4
2.	Saya dibenarkan membuat keputusan selagi tugas tersebut dapat disiapkan dengan baik.	1	2	3	4
3.	Saya boleh menyuarakan pendapat saya jika ia boleh meningkatkan prestesi kerja saya.	1	2	3	4
	<i>Sokongan Penyelia</i>				
1.	Penyelia saya sentiasa membantu kaki-tangannya untuk menyiapkan kerja mereka.	1	2	3	4
2.	Penyelia saya mengambil berat tentang kebajikan kaki-tangannya seperti isu keselamatan.	1	2	3	4
3.	Penyelia saya mahir merancang and menjadualkan kerja-kerja kaki-tangannya.	1	2	3	4
4.	Saya tidak mempunyai konflik dengan penyelia saya.	1	2	3	4
	<i>Sokongan Pekerja</i>				
1.	Rakan sekerja saya adalah peramah.	1	2	3	4
2.	Rakan sekerja saya sering bantu-membantu.	1	2	3	4
3.	Saya dan rakan sekerja dapat bergaul mesra.	1	2	3	4
4.	Saya dan rakan sekerja boleh berkerjasama.	1	2	3	4
	Kesukarelaan Korporat				
	<i>Nilai</i>				
1.	Saya bersimpati terhadap orang-orang yang kurang bernasib baik.	1	2	3	4
2.	Saya amat mengambil berat tentang kebajikan yang diperlukan oleh masyarakat tertentu.	1	2	3	4
3.	Saya bersedia membantu mereka yang sakit atau sedang mengalami kesusahan.	1	2	3	4
4.	Saya bersedia untuk membantu masyarakat yang memerlukan bantuan.	1	2	3	4
5.	Saya bersedia untuk melakukan sesuatu aktiviti kebajikan untuk masyarakat yang memerlukan lebih perhatian.	1	2	3	4
	<i>Persefahaman</i>				
	Jika saya berpeluang menyertai aktiviti kebajikan, ...				
1.	pengetahuan yang berkenaan dengan <i>tanggungjawab sosial</i> dapat diperluaskan.	1	2	3	4
2.	saya akan dapat memahami <i>makna</i> tanggungjawab sosial dengan lebih mendalam.	1	2	3	4
3.	saya akan dapat melaksanakan tanggungjawab sosial.	1	2	3	4
4.	saya akan dapat belajar bagaimana berurusan dengan pelbagai orang.	1	2	3	4
5.	saya akan dapat menerokai kekuatan diri sendiri.	1	2	3	4

6.	saya akan dapat membantu masyarakat tertentu atau memelihara sesuatu yang penting bagi generasi yang akan datang.	1	2	3	4
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Bagi setiap pernyataan berikut, sila **tandakan** (√) nombor skala yang dapat menggambarkan situasi kerja anda sekarang.

1 (Tidak pernah)	2 (Jarang)	3 (Kadang-kala)	4 (Kerap kali)
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	Kenyataan	Skala Nombor			
	Penglibatan Pekerjaan				
	Bertenaga				
1.	Saya berasa bertenaga sewaktu melaksanakan tugas saya.	1	2	3	4
2.	Saya berasa bersemangat sewaktu menyempurnakan tugas saya.	1	2	3	4
3.	Saya akan cuba untuk meneruskan tugas saya walaupun sedang mengalami kesukaran.	1	2	3	4
	Dedikasi				
1.	Saya gemar dan menghargai tugas saya.	1	2	3	4
2.	Saya berasa seronok sewaktu menjalankan tugas saya.	1	2	3	4
3.	Saya bersedia melakukan sesuatu atau memberi idea kepada pihak pengurusan tentang apa yang boleh dilakukan pada masa hadapan.	1	2	3	4
4.	Saya berbangga / bergembira dengan kerja-kerja yang telah saya lakukan.	1	2	3	4
	Penyerapan				
1.	Masa berlalu dengan cepat apabila saya bekerja .	1	2	3	4
2.	Saya memberi tumpuan sepenuhnya kepada tugas saya.	1	2	3	4
3.	Saya berasa gembira apabila saya bekerja gigih.	1	2	3	4
4.	Saya melibatkan diri dengan kerja-kerja yang saya ditugaskan.	1	2	3	4
5.	Saya berasa bermotivasi apabila bekerja .	1	2	3	4
6.	Saya berasa sukar untuk melepaskan diri dari kerja-kerja yang saya ditugaskan.	1	2	3	4
	Burnout Pekerjaan				
	Kelesuan				
1.	Saya merasakan bahawa kekuatan emosi atau fizikal saya sedang merosot secara beransur-ansur kerana komitmen kerja saya.	1	2	3	4
2.	Saya akan berasa letih jika hari tersebut ialah hari kerja.	1	2	3	4

	<i>Sinis</i>				
1.	Saya semakin kurang berminat dengan kerja-kerja harian saya.	1	2	3	4
2.	Saya semakin kurang bersemangat dengan kerja-kerja harian saya.	1	2	3	4
3.	Saya hanya mahu menjalankan tugas saya tanpa diganggu oleh orang / tugas lain.	1	2	3	4
4.	Saya telah menjadi lebih panas baran atau sensitif pada waktu kerja.	1	2	3	4
5.	Saya mula meragui prestasi kerja saya.	1	2	3	4
	<i>Keberkesanan Profesional</i>				
1.	Saya dapat menyelesaikan masalah-masalah yang timbul dalam kerja-kerja yang saya ditugaskan.	1	2	3	4
2.	Saya berpendapat bahawa saya telah menyumbangkan sesuatu kepada organisasi.	1	2	3	4
3.	Saya berpendapat bahawa saya mempunyai prestasi kerja yang baik.	1	2	3	4
4.	Saya berasa riang/bertenaga apabila mencapai objektif di atas kerja-kerja yang saya ditugaskan.	1	2	3	4
5.	Kerja-kerja yang saya ditugaskan telah membawa pelbagai faedah kepada organisasi.	1	2	3	4
6.	Saya berkeyakinan atas pencapaian kerja-kerja yang saya ditugaskan.	1	2	3	4

Seksyen B: Demografi

Untuk tujuan statistik, sila **tandakan** (\surd) bagi maklumat yang sesuai mengenai diri anda.

1. Jantina Lelaki Perempuan
2. Umur < 20 tahun 21-40 tahun
 41-55 tahun > 55 tahun
3. Bangsa (Untuk rakyat Malaysia sahaja) Melayu Cina
 India Lain-lain, iaitu: _____
4. Kewarganeraan Rakyat Malaysia Lain-lain, iaitu: _____
5. Taraf pendidikan tertinggi Sehingga SPM/STPM Diploma

	<input type="checkbox"/>	Ijazah: Sarjana Muda/ Sarjana/ Doktor Falsafah (sila nyatakan)	<input type="checkbox"/>	Lain- lain, iaitu: _____
6. Taraf pekerjaan sekarang	<input type="checkbox"/>	Operasi	<input type="checkbox"/>	Eksekutif
	<input type="checkbox"/>	Pengurusan Atasan	<input type="checkbox"/>	Lain-lain, _____ iaitu
7. Tempoh perkhidmatan	<input type="checkbox"/>	1-5 tahun	<input type="checkbox"/>	10 tahun ke atas
	<input type="checkbox"/>	6 -10 tahun	<input type="checkbox"/>	Lain-lain, _____ iaitu

**TERIMA KASIH KERANA SUDI MEMBERIKAN KERJASAMA UNTUK
MENGISI SOAL SELIDIK INI**