

**WORK STRESSORS, TECHNOSTRESS AND EMPLOYEE
COMMITMENT TO CHANGE: THE MODERATING
EFFECT OF INTERNAL COMMUNICATION**



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COMMITMENT TO CHANGE: THE MODERATING EFFECT OF
INTERNAL COMMUNICATION**

By



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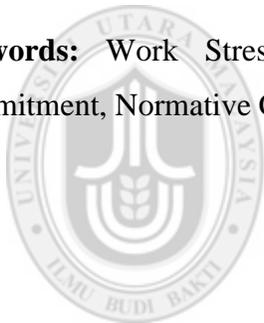
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ABSTRACT

The purpose of this study is to examine the relationship of work stressors (role overload, role conflict, role ambiguity, organizational constraints and interpersonal conflict) and technostress (techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty) on employee commitment to change. This study also examined whether internal communication as a moderator give an impact to work stressors and technostress on the relationship with employee commitment to change among non-academic staff in three universities located in northern region of Malaysia which are UUM, UNiMAP and UiTM Perlis. Regression analysis results showed techno-invasion and techno-insecurity have significant and negative relationship with employee's normative commitment to change. The result also indicated internal communication as a moderator has a significant relationship between techno-uncertainty and employee's affective commitment to change. Finally, result also indicated internal communication as a moderator has a significant relationship between techno-uncertainty and employee's normative commitment to change.

Keywords: Work Stressors, Technostress, Affective Commitment, Continuance Commitment, Normative Commitment, Internal Communication



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ABSTRAK

Tujuan kajian ini adalah untuk mengenalpasti hubungan antara tekanan kerja (bebanan peranan, konflik peranan, kekaburan peranan, kekangan organisasi dan konflik antara perseorangan) dan tekno tekanan (tekno-beban, tekno-serangan, tekno-kerumitan, tekno-ketidakselamatan dan tekno-ketidakpastian) terhadap komitmen pekerja kepada perubahan. Kajian ini juga mengenalpasti sama ada komunikasi dalaman sebagai moderator memberi impak kepada tekanan kerja dan tekno tekanan terhadap hubungan komitmen pekerja kepada perubahan dalam kalangan kakitangan bukan akademik di tiga universiti yang terletak di kawasan utara Semenanjung Malaysia iaitu UUM, UNiMAP dan UiTM Perlis. Keputusan analisis regresi menunjukkan bahawa tekno-pencerobohan dan tekno-ketidakselamatan mempunyai hubungan yang signifikan dan negatif dengan komitmen normatif pekerja terhadap perubahan. Keputusan juga menunjukkan komunikasi dalaman sebagai moderator yang mempunyai hubungan signifikan antara tekno-ketidakpastian dan komitmen afektif pekerja kepada perubahan. Akhir sekali, keputusan juga menunjukkan bahawa komunikasi dalaman sebagai moderator yang mempunyai hubungan signifikan antara tekno-ketidakpastian dan komitmen normatif pekerja kepada perubahan.

Kata Kunci: Tekanan Kerja, Tekno Tekanan, Komitmen Afektif, Komitmen Penerusan, Komitmen Normatif, Komunikasi Dalaman.

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LIST OF ABBREVIATIONS

MoHE	Ministry of Higher Education
MEB	Malaysian Education Blueprint
HE	Higher Education
HLIs	Higher Learning Institutions
UUM	Universiti Utara Malaysia
UNiMAP	Universiti Malaysia Perlis
UiTM	Universiti Teknologi Mara
USM	Universiti Sains Malaysia
ICT	Information Communication Technology
SET	Social Exchange Theory
ICTs	Information Communication Technologies



CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Change is a common matter of business life. In line with today's globalization most of the organizations faced with new development in their business operation. As stated by Nafei (2014) change is a natural phenomenon which cannot be controlled by people. The word of change, renovation, restructuring, innovation or transformation is the situation where organizations experienced from time to time. According to Dordevic (2004) organizations must adapt to new business transformation if they want to be successful and sustainable in the long run, for instance, the pace of change in the organization continuously occurs to enhance and upgrade the facilities, administration, productivity and development of the organizations in line with its vision and mission.

However, in order to implement change in the organization, it needs a total commitment from employees to commit to change and the organization also should take serious attention on this issue because it may cause difficulties to the organization to implement change when employees are not ready for it. As stated by the researchers, the success of change is not only based on the decrease of resistance, but it commonly depends on how individuals support and put their commitment to change (Kalyal, 2009; Piderit, 2000). Basically, employees will be interested to commit to restructuring when they have been

informed about the full story of change; however, employees who tend to resist change usually are not able to see the rationale of the implementing new changes in organizations.

Changes occur across industry globally, education is one of the sectors that implementing change continuously in order to be competitive in the education system. In line with today's globalization, the Malaysia's Ministry of Education had made several of transformation in order to improve and enhance the education system aligned with the world education system. In 2013, there has been a major transformation, developed by the Ministry of Higher Education (MoHE) which is Malaysian Education Blueprint 2015-2025 (Higher Education) or known as the MEB (HE). Furthermore, according to the ministry, the purpose of developing the MEB is to create the education system that ranks among the world's leading education system that enables the Malaysian to compete in the global economy (MoHE, 2015).

Besides, according to MoHE (2015) the success of MEB is relying on 10 shifts that have been created by the Ministry of Higher Education (MoHE). The empowerment of governance and global prominence are among the ten shifts that have been highlighted in this study. This is because, in order to achieve the success of transformation of education system the institution not only need to depend on the academic staff, but also the non-academic staff. The role of non-academic staff in an institution is very crucial in order to ensure the strategic planning of transformation progressing with efficient and effective in order to achieve the target that had been highlighted by the Ministry of Education.

The empowerment of governance is important for the efficient function of any organizations and for building great institutions. Besides, in order to achieve the transformation of the education system, the empowered governance is crucial to each of the institutions to have their own portfolio as a fully-autonomous or semi-autonomous HLLs based on their readiness and capacity for decision-making. In achieving the empowered governance outcomes, the Ministry of Education should focus on the policymaker, regulator, also give a greater decision-power and accountability to the HLLs in order to lead the institutions. Hence, non-academic staffs in each institution who gain the fully or semi autonomous should be well prepared to face with new changes and innovation that implemented by the institutions.

In addition, focusing on the global prominence will generally enhance the Malaysia's higher education to become as an international education hub with a difference, providing the value-driven which is relevant to the global education, recognized by students for its balance of quality and affordability, good quality of life, and rich cultural experiences. Moreover, based on the global prominence, Malaysia's target is to reach new markets through more innovative programs and partnerships. In order to achieve the requirement of the goals targeted, the transformation needs to be implemented in each of the institutions. So, the non-academic staff is directly affected by this transformation because they need to adapt to a new environment, where they need to face changes in their job tasks.

In order to confront with new changes in the Malaysian education system, institutions need to convince and influence staff, so that they are willing to give a total commitment even though in a pressure situation, for instance dealing with work overload. This is because, changes can affect employee's emotions and physical when they face with the overload of duties and new technology advancement in a way to reach the targeted goals. Furthermore, the implementation of the transformation needs to seek high commitment and accountability from every staff at all levels in the universities. The staff also needs to confront with barriers to change in order to achieve the vision and mission of the transformation.

Besides analyzing the dimension of work stressor which are role overload, role conflict, role ambiguity, organizational constraints and interpersonal conflict, this study also focuses on the technostress that involves five dimensions which are techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty. This study also applies the moderating effect of internal communication in order to influence the employee to give their commitment to change even when they face adversities such as work stressors and technostress in their work place. The study will be conducted among the non-academic staff in the northern region of Malaysian public universities.

Additionally, the ideas of using the work stressors (role overload, role conflict, role ambiguity, organizational constraints and interpersonal conflict) and technostress (techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty) as the independent variables and internal communication as moderating variable for this study is because these variables are identified as the most crucial factors

that cause the employee to face with pressure and at the same time lead them to refuse to give commitment to change, but, the existing of internal communication as a moderating effect will enhance employee to become more motivated to cope with change in the organization.

1.2 Problem Statement

Nowadays change has given a huge impact towards universities and employees. The changes in the universities might affect individual's behavior, emotion, psychology, physiology and attitudes. In order to achieve the MEB system, universities need to play their role to influence and convince staff to give a total commitment in order to enhance and improve universities' performance. However, every change is made in an organization might incline to the difficulties and resistance because not all employees will immediately accept or adopt the changes.

Sometimes, employees are not confident to commit themselves to change due to insufficient information regarding changes. Moreover, according to the previous researches, typically the central position of change management greatly depends on the employee's acceptance and support in order to achieve the success of implementing change in the organizations (Kuipers & Greoneveld, 2013; Bartunek, Rousseau, Rudolph, & DePalma, 2006; Herold, Fedor & Caldwell, 2007). Besides that, continuing of change in the organization may increase the levels of workplace stress, such as increment of assigning tasks and transformation of new technology among members.

This matter occurred because employees are unable to cope with the demand for change that are implemented by the organization and the continuing of the unsolicited change also has become as a factor that leads the employees to face with stress during in the workplace.

Besides, misunderstanding of the context of change might cause less commitment from employees because they could not understand the scope of change implemented in the organizations. Next, the differences of employees in person commonly lead to the difference thought and perception about change may also affect the employee's reaction to change (Grove, 2004). Change will commonly gives negative impact to a number of employees' commitment, because it may influence employees to feel less in morale and trust, feel insecure with their jobs, and increase the stress. According to Grove (2004) usually people who have just a little or no control to change or obstacles that exist during change might experience high level of stress.

Recently, the Ministry of Education announced the new strategic plan for the Malaysian education system which is called as a Malaysian Education Blueprint (Higher Institution) or MEB (HI) that involves the institute of higher education in Malaysia especially the public institution toward a world-class university. As such, to achieve the excellence of the education system, each of the university's staff either academic or non-academic is involved to cope with change in order to reach the university's goals aligned with the MEB system. Importantly, the non-academic staff will be more exposed to pressure and challenges because any changes that occurred will impact to the management beforehand, such as changes in procedure and policy that need to be faced

by the management staff. The non-academic staff needs to cope with various changes regarding their tasks aligned with the mission and vision of the universities.

The administrative staffs have to assume different roles in occupational with the change for instance, employees are given with multidimensional of work scope in order to gain the achievement as a world-class university. Previous research by Grove (2004) proved that change in the organizations led to the increment of strain and pressure among the members of the organization. Thus, there are some complexities that will be experienced by employees such as role overload, role ambiguity, role conflict, organizational constraint and interpersonal conflict. Furthermore, this change may affect employees negatively if they do not prepare themselves with the new changes, but it also may give a positive impact to individuals if he or she is prepared with new changes. As stated by previous researches Jasmani and Abdul Jumaat (2011), employee's work stress appears when there is an increment in work targets, changing in the organization, and innovation of the technology advancement.

Besides, stress seems to be very harmful to the organization members because it may affect their performance, job satisfaction and motivation towards their career. This is due to the employees' perception and attitude of thinking that they do not have the capabilities to place commitment and to confront with change at the workplace that typically will lead them to experience multi-stress and reduce their commitment for change in the organization. Glazer and Beehr (2005) and Lui, Spector and Shi (2007) pointed out that, there are a lot of studies which related to the impact of work stress, however, according to Rashid and Zhao (2010), the study on the impact of work stress

has not been studied thoroughly in the context of employee commitment to change. So, there are still gaps between the impact of work stress and employees' commitment to change that need to be studied. This is because stress exists in many conditions of work such as role overload, role conflict, role ambiguity, organizational constraint and interpersonal conflict. These stressors need to be examine either it affects the employee commitment to change in the workplace.

In addition, heading toward the world-class university ranking and to fulfil the agenda of MEB, the staff of UUM, UNIMAP and UiTM also experienced new technology innovation. The universities need to confront with the education systems that frequently change. So, the universities need to ensure that all administrative employees should take accountability and give their total commitment to technology change in order to achieve the innovation of technology aligned with today's technology advancement. However, there will be problems if employees are not ready to accept or adapt to technological innovation. This is due to the inability of the employee to adapt and cope with the information technologies which quickly change due to the globalization (Jena & Mahanti, 2014). For example, the lack of the proper training and awareness regarding new technology innovation at the workplace will lead the employee to confront with technostress (Jena & Mahanti, 2014).

Moreover, the transformation of information communication technology (ICT) will affect the employees to technostress, which is also known as technology stress when employees are not capable to cope with the new technologies. A study by Okebaram and Moses (2013) stated that technostress is a challenge inherent issue in today's

globalization that caused employee's inability to commit to new technology innovation. Besides, the implication of technology change might affect the user who is not familiar with it. A research by Comptia (2013) stresses that, among the generation in the workplace, it is essential for the organization to clearly note the way the employees engage with technology in the organization. This is because; different generation (e.g., baby boomer, Gen-X, and Gen-Y) will have different views about the information regarding technology changes.

As universities want to achieve great information communication technology (ICT), there will be a lot of innovations in technology that employees need to utilize. This may lead them to technostress where they might face with techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty. Besides, the research on technostress with employees commitment to change is still limited and it has a gap because previously researchers only studied technostress based on the trend and challenges (Laspinas, 2015), the effect of technostress (Okebaram and Moses, 2013), technostress and job performance (Azam et al., 2014), technostress with education environment (Booker, Rebman, and Kitchens, 2014), technostress and organizational commitment (Ahmad, Amin and Ismail, 2014). So, it is significance for this study examine the issues regarding technostress and the employee commitment to change in order to identify the effect of the technostress towards the individuals in the organization.

Next, in order to enhance employees' commitment to change, the moderating effect of internal communication has been applied in this study. In line with the transformation of

MEB (HI) by Ministry of Education, it is reasonable for this study to use internal communication in order to enhance employees' commitment to change, even though during the transformation process employees faced with various of difficulties and challenges that led them to stress in order to achieve the universiti's vision and mission. Internal communication will positively help both universities and employees to collaborate toward the vision and mission of the universities.

According to Kitchen and Daly (2002), internal communication is very important in an organization to achieve organizational success and it is also one of the factors that contributes to the existence of the organization. Besides, internal communication also link both management and employees to meet the solution regarding the problems that arise. The excellent internal communication between leader and employees may lead the organization to achieve the goals requirement because a two-way communication usually will result in good effect which can influence the employee to change. It was supported by previous studies of Kitchen and Daly (2002) the successful of managing people requires the good quality of communication from both leader and employees so that it can help to enhance the change at the workplace.

In addition, the internal communication at the workplace can also provide employees with correct information regarding the changes. Besides, the internal communication can motivate employees to give their total commitment to change in the organization. Thus, based on the issues, it is important for this study to examine how the work stressors and technostress contribute to the employee commitment to change, and internal

communication as the moderating effect of this study in order to enhance the independent variable and dependent variable of this study.

1.3 Research Questions

Based on the research problems the following questions are posed. Thus, the following are the research questions for this study:

- 1) Does employee work stressor (role overload, role conflict, role ambiguity, organizational constraints and interpersonal conflict) affect employee commitment to change (affective, continuance and normative)?
- 2) Does employee techno-stress (techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty) affect employee commitment to change (affective, continuance and normative)?
- 3) Does internal communication moderate the relationships between work stressors (role overload, role conflict, role ambiguity, organizational constraints and interpersonal conflict) and employee commitment to change (affective, continuance and normative)?
- 4) Does internal communication moderate the relationship between techno-stress (techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty) and employee commitment to change (affective, continuance and normative)?

1.4 Research Objectives

To answer the research questions the following research objectives are developed.

- 1) To determine the influence of employee work stressors (role overload, role conflict, role ambiguity, organizational constraints and interpersonal conflict) on employee commitment to change (affective, continuance and normative).
- 2) To determine the influence of employee technostress (techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty) on employee commitment to change (affective, continuance and normative).
- 3) To determine the moderating effect of the internal communication on the relationship between work stressors (role overload, role conflict, role ambiguity, organizational constraints and interpersonal conflict) and commitment to change (affective, continuance and normative).
- 4) To determine the moderating effect of the internal communication on the relationship between technostress (techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty) and commitment to change (affective, continuance and normative).

1.5 Significance of the Study

Both academicians and practitioners have continuously stressed the importance of organizational change study, especially for the organizations and individuals in order to have a better understanding about fundamental of commitment to change. This study can be referred by researchers for future practice, research and theory. This study will guide the public institution on how to influence their employees to give a total commitment to change even though there are many hassles such as work stress and techno-stress that contribute as negative impact on commitment to change. This study cover dimensions of work stressors and techno-stress which may help the organization to recognize every single stress dimension in order to enhance employee's commitment to change in the organizations.

Besides that, the importance of internal communication among members of organizations is also a crucial moderating variable in this study to increase the commitment among the organization members towards a change. Furthermore, organization leader who is able to communicate about change clearly might influence the employee to give commitment and at the same time may support employees to reduce their level of stress. This study also provides the empirical and theoretical supported such as Social Exchange Theory, Lewin's Three-Steps Change Model and Schein's Three-Step Model in order to generate knowledge and understanding about he link of the theoretical and variables of this study. Next, this study also provides the practical support that helps to generate knowledge, such as implementation of new policies and procedure since change has been implemented. Finally, this study provides

the limitation and contrast ideas from the previous and current researches in order to explain the commitment to change, work stressors and techno-stress as well as the benefit of using internal communication in the organization more practically.

1.6 Scope of the Study

This study was conducted in three public universities which namely University Utara Malaysia (UUM), University Malaysia Perlis (UNIMAP) and University Teknologi Mara (UiTM) Perlis's branch. The population and sample for this study were non-academicians staff. This study also focused on the permanent and contract staff. Besides, all levels of administrative staff have been selected to participate in this study in order to identify their level of stress during in the workplace that affect their commitment to changes in organization. So, this study examines the relationship between work stressors and techno-stress that contribute the employee's commitment to change and the internal communication as a moderating effect. Thus, this study also consists of limitation and gap for future research.

1.7 Definition of Key Terms

1.7.1 Employee Commitment to Change

Employee commitment is a sense of an individual to support changes in the organization that related to three dimensions (1) an individual desire to provide support to change based on belief and its inherent benefits (affective commitment to change), (2) a

recognition that are costs related with the failure in order to provide support to change (continuance commitment to the change) and (3) a sense of obligation by an individual to support the change in the organization (normative commitment to change) (Hercovitch and Meyer, 2002).

1.7.2 Work Stressors

Work stress is considered as something that can harmful the employee's physical and emotional reaction, because it occur when the requirement of the certain task or job are not matched with the capabilities, resources, or need of the employees (Marzabadi & Tarkhorani (2007).

1.7.2.1 Role Overload

Role overload is related to the excessive duties or responsibilities which employees need to do in the workplace (Jasmani & Abdul Jumaat, 2011).

1.7.2.2 Role Conflict

Role conflict is an incompatibility of both demands and expectations that linked to the roles (Idris, 2011).

1.7.2.3 Role Ambiguity

Role ambiguity is a circumstance that employees are not receiving a clear feedback from others regarding specific information which associated with their duties and work role requirement (Jasmani & Abdul Jumaat, 2011).

1.7.2.4 Organizational Constraints

Organizational constraints referred to the lack of the supplies, poor equipment, inadequate assistance from the internal (members of the organization), barriers in the workplace that commonly threaten the resource depletion and individual personal investment is not compensated (Liu, Nauta, Li & Fan, 2010).

1.7.2.5 Interpersonal Conflict

Interpersonal conflict is commonly regarded disagreement between individual with another, sometimes it happened due to the poor treated from one's to others at work (Spector and Jex, 1998).

1.7.3 Technostress

Technostress can be identified as any negative effect that influenced the one's behavior, thought, attitude and psychology that results from the use of the computer-based ICTs (Tu, Wang, & Shu, 2005).

1.7.3.1 Techno-Overload

Techno-overload is about a situation where a leader who inclined to communicate more information than it should be and obtain more information that they can effectively process and use (Tarafdar, Tu, Ragu-Nathan, & Ragu-Nathan, 2007).

1.7.3.2 Techno-Invasion

Techno-invasion is defined as a situation where individuals feel that he or she cannot be escaped from the technology because they think that they are under surveillance and their lives has been conquered or overrun by the technology (Tarafdar et al., 2007).

1.7.3.3 Techno-Complexity

Techno-complexity is about the employee's inadequate of the knowledge, skills and abilities (KSAs) in order to use the technology, that forced them to spend time, effort and willingness to understand the technology innovation from the various aspects (Tarafdar et al., 2007).

1.7.3.4 Techno-Insecurity

Techno-insecurity reflect the feeling of threats that face by employees regarding their current job that probably will passed to others who expert and possess better knowledge, skills, and abilities about technology compared to them (Tarafdar et al., (2007).

1.7.3.5 Techno-Uncertainty

Techno-uncertainty is a situation that arises when technology is upgraded or updated with new information or applications and functions in order to enhance the ICTs system (Tarafdar et al., 2007).

1.7.4 Internal Communication

According to previous studies, communication is referred as a process of sending, receiving and the understanding the meaning of the information or resources (Ergen, 2010).

1.8 Organizational of the Research

This research contains of five chapters. Chapter 1 discussed about the research background, followed by the problem statement of this study, research questions and research objective, scope and limitation of the study, definition of key terms, operational definition and lastly is the organization of the research. Chapter 2 contains the literature review, which stressed about each variable. Besides, in this chapter, the researcher also discusses the previous researches regarding commitment to change, work stressors, techno-stress and internal communication in order to enhance the researcher understanding about related topics. This chapter also consists the underpinning theory to support this study. Chapter 3 is about research method which focuses on the research framework of this research, research hypothesis also have been developed in this chapter, research design, measurement, data collection methods, and techniques of data analysis. Then, it is continued by chapter 4 which presents the finding and outcome of research. Finally, chapter 5 contains the conclusion of this study, implications and limitation, and future study of the research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the literature which is related to the research problems in this study. The main focus of this study is about the employee's commitment toward change in the organization and how work stressors and technostress in today's globalization have influenced employee's behavior, attitude and emotion in order to commit change in the organization. Whereas, in order to enhance employee's commitment to change in the workplace, the moderating effect of the internal communication has been applied in this study. The researcher has arranged this literature review into several sections.

First of all, this chapter reviewed previous studies on employee's commitment to change and its three dimensions of model. In the second section, this study reviewed the literature about the work stresses and its five dimensions. Third, section continues with the technostress and its dimension. Fourth, a review about the internal communication and it is followed by the underpinning theory of this study. Next section contains hypotheses development of the study and theoretical framework. Finally, a summary of the chapter is presented.

2.2 The Conceptualization of Commitment to Change

According to Burnes (2004), a change can be both persistent and pervasive or normality. The word “change” is a continuing process to improve the productivity, as well as enhancing the organization and employees. Nowadays, change seems to be very crucial to all organizations. In line with the current sophisticated technology, the implementation of change is indispensable to enhance the organizational profit and to compete with other competitors. The change is not only about new matter, but change can be created based on the previous matter by upgrading it according to the current period.

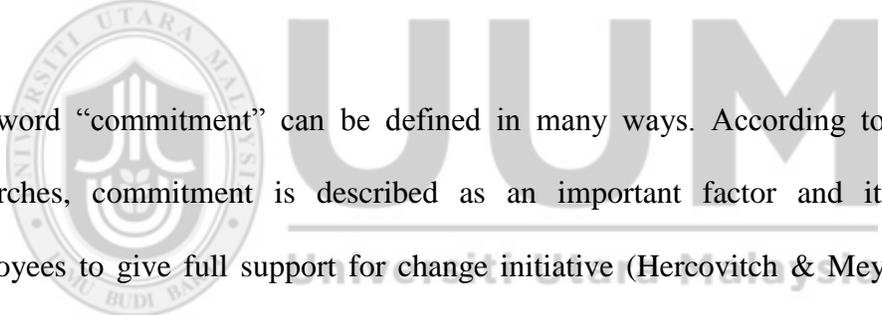
Besides, the word of the “organization” is very comprehensive and it can be described in many ways. As stated by Abbas and Asghar (2010), traditionally an organization has been developed with social unit which basically comprises with a group or team of people that work together in order to achieve the benefits of an organization and continuously work to get the organizational goals and targets. Robbins and Judge (2013) describe an organization as a place that is coordinated with social unit and consists of two or more people to do its relatively continuous duties in order to achieve the targeted mission and vision or goals. Likewise, Senior and Fleming (2006) define organization as a combination of group, people and individuals who are trying to affect others in order to achieve the specific objectives by using different ways such as processes and technologies as a structured way.

Whilst, according to Ahmad and Gelaidan (2011) organizational change is defined as the transformation that occurs in the workplace in term of the shift of the industry structure, technology innovation and development, economic condition and crisis, market competitive force and growth. In the same manner, Robbins and Judge (2013, p. 613) state that organizational change is about the changing of the nature of workforce, technology, economic shocks, competition, social trends and world politics. Organizational change is an essential issue that always takes part in every organization in order to develop, improve and enhance the business performance and services.

Likewise, Graetz, Rimmer, Smith and Lawrence (2010) also state that a change in an organization occurs because of the unstable and incompetent management, economic issues, regulatory, political and technological advancement that lead to pressure among the employees who face it. Even though, organizational change can be viewed in multiple contexts, this study defined organizational change as the continuous basis of development of new information technology, change in policy and procedure, the new restructuring of work task, budgets cuts, newcomers, and the introduction of new ideologies in management in order to achieve the mission and vision of the organization.

Besides, as highlighted by Borges (2009), in order to reach the success of organizational change, first of all, employees need to change their attitude, behavior and ideology regarding a change in order to fulfill the demand of changes. It means that, organization members should view the change in a positive perspective and they must commit to the change without prejudices. This is because, once the employees have good views regarding change they will be more motivated to cope to change at the workplace.

According to Kalyani and Sahoo (2011) and Fok-Yew, Ahmad and Baharin (2013) describes that, the achievement of an organizational change basically depends on how the management handles it. In addition, due to the acceleration of the ever-increasing change, it is crucial for the organization to learn about change and adapt it in order to survive (Joiner, 2001; Schabracq, Winnubst and Cooper, 2003). Graetz et al. (2010) states that, typically the goals of change in the organizations are to make improvement to the workplace environment as rapidly as possible and a change also commonly leads to the increment of organizational effectiveness. It is crucial to choose the most appropriate change approach in order to achieve the success of change that is being undertaken (Burnes, 2004).



The word “commitment” can be defined in many ways. According to the previous researches, commitment is described as an important factor and it engages the employees to give full support for change initiative (Hercovitch & Meyer, 2002). In another view, commitment is regarded as a function of individual behavior that can be developed to confront commitment in line with the organization goals (Hercovitch & Meyer, 2002).

While, organizational commitment relates to the employees behavior and attitude that affect the organization performance. It was supported by Johnston, Parasuraman, Furell and Black (1990) that organizational commitment consists of two concepts which are behavior and attitude. In the same way, Lambert & Paoline (2008) refer organizational commitment as a bond or relationship that possess by individuals with his or her organization. Besides, Mohammadian and Amirkabiri (2014) stated that organizational

commitment is about the individual's willingness who has a strong desire to survive in an organization or desire to put the effort and perform as much as he or she can in order to gain the organizational objectives.

A study by Meyer and Allen (2004) declared that there are three components of employee's commitment's model to change. All the components conceptualized commitment as an individual's mind-set or psychology, which basically will increase the likelihood of individuals in the organization to maintain their membership. According to Meyer and Allen (2004) the first component of the model is affective commitment which means desire to remain. It means that, the employees with a high level of affective commitment usually will stay because they want to do so. Second is continuance commitment which means perceived cost of living where the employees with a high level of continuance commitment commonly will stay because they have to do so. Lastly is a normative commitment that refers to the perceived obligation to remain in the organization. It is because employees with a high level of normative commitment will stay because they feel they ought to.

For those who want to remain (affective) commonly will show good attitude by attending to work regularly, perform the given task with their effort and ability, not to mention this person will also put a little extra in order to help them out (Meyer and Allen, 1991). In other words, employees who have a high desire will put their commitment to the organization because of his or her willingness. Next, according to Meyer and Allen (1991) continuance commitment is related to the individual's knowledge and cost that are associated with leaving the organization. This type of

commitment will be sustained because it meets the requirement of change. Meanwhile, a normative commitment appears when there is a feeling of an obligation among the members to continue the employment.

Even though, Meyer and Allen (1990) tried to insert the various of dimension about the organizational commitment in all their three components, but there are still some issues regarding individuals' commitment which according to them, individuals might have difference commitment of all the three components. Thus, this study used the component of employees' commitment as individuals in order to gain a clearer insight for each and every factor and how it can affect the employees' job stress and techno-stress during the implementation of the change in the organization.

Both commitment and behavior of an individual are related to each other in order to lead to the employees' commitment to change. It was supported by the previous studies Meyer, Srivinas, Lal, & Topolnytsky (2007) that the employees' commitment to change basically involves both commitment and behavior by putting a total effort to the existing changes. Besides, based on the Herscovith and Meyer (2002) in their finding studies established that, the measure of the employees' commitment to change actually used three components of model and each of these components were differed from each other, and they were also distinguished from the organizational commitment.

Based on the model of commitment to an organizational change from Herscovith and Meyer (2002) and their theory on a workplace commitment (2001) defined commitment to change as “a mindset that forced and binds an individual to the relevant course of

actions in order to achieve the change initiative target”. A further explanation by both researchers has shown that the mindset basically reflects (1) an individual desire to provide support to change, based on belief and its inherent benefits (affective commitment to change), (2) a recognition that there are costs associated with the failure to provide support for the change (continuance commitment to the change) and (3) a sense of obligation by an individual to support the change in the organization (normative commitment to change). It means that, employees can feel bound in order to support the change because they want to, have to and ought to commit and support change in the organization (Hercovitch & Meyer, 2002; Meyer & Allen, 2004).

According to Gelaidan (2012) employee being the main factor which helps to contribute the success of organizational change. Hence, the significance of the employees’ commitment to change has been studied and supported by many researchers, such as ((Fedor, Caldwell & Herold, 2006; Herscovitch & Meyer, 2002; Wanberg & Banas, 2000; Oakland & Tanner, 2007). Thus, the following section discuss the dimension of commitment to change which are affective, continuance and normative commitment in details.

2.2.1 Affective Commitment to Change

According to Meyer and Herscovith (2001) an affective commitment to change is described as an individual desire in order to give his or her support to change or give commitment to a target. It means that, employees with an affective commitment to change, commonly, feel “want to” do something or change, rather than are forced to commit to change. Moreover, according to Meyer and Herscovith (2001) they have

proposed three factors that contributed individual's affective commitment to change, they are; (1) the individual target of commitment, (2) shared values that are related to the outcomes of the commitment, and (3) the introduction of the aim or target of the commitment. As stated by Boles, Madupalli, Rutherford and Wood (2007) an affective commitment is considered as the most effective measure for the commitment to change in the organization since it was indirectly influenced other two dimensions of the commitment to change. An affective commitment to change was also found more consistent with the conceptual of the attitudes and behaviors (Iverson & Buttigies, 1999; Malik, Waheed, Malik, 2010).

2.2.2 Continuance Commitment to Change

The continuance commitment to change is referred as “have to”, which means that, there have a cost that closely related to the failure in order to give effort and support to change (Herscovith & Meyer, 2002). According to the previous empirical studies, employees who possess a high level of continuance commitment commonly perceive that it is very costly if it does not commit to a certain target or a course of action that has been occurring in the organization (Gelaidan, 2012; Meyer & Herscovitch, 2001). It means that, continuance commitment might influence the employees with the related cost such as tenure, pay, benefit and so forth (e.g. Meyer and Allen, 1991) that might incline the employees to continue their commitment in order to reach a target. Likewise, Gelaidan (2012) also states, the high continuance commitment might bind employees to a target that has been set by the organizations.

2.2.3 Normative Commitment to Change

Normative commitment is about a sense of “ought to” where the employees have a feeling of obligation in order to provide support to change (Meyer & Herscovith, 2001). In this context, employees feel that they should take the accountability to give their support or commitment to change that has been implemented in the organization. The willingness from the employees to commit a change shows that they have a high level of loyalty toward the organization. In addition, a study by Gelaidan (2012) has stated that individuals who possess a high normative commitment basically tend to feel that they are "ought to" be committed to the changes that have been implemented in the organization.

Meyer and Allen (1997, as cited in Gelaidan, 2012) stated that, a normative commitment has been found to be similar effects with the affective commitment. Moreover, it was supported by previous studies that there is no significant differences between both affective and normative commitment to a change to the organizational outcomes (Felfe, Yan & Six, 2008; Wang, Indridasson & Saunders, 2010). Therefore, all the three components of employees' commitment's model to a change is very important in order to gain the achievement of the organizational changes.

2.3 The conceptualization of Work Stressors

Nowadays, the rapid pace of the technology and globalization have affected the organization productivity and performance. There are a lot of things that have been changed in order to achieve the organization vision. In line with the information communication technology (ICT) innovation and the new globalization in today's business challenges, the restructuring of organizational strategic planning such as a new procedure, new policies and new circular will improve business activities in order to achieve the organization vision and mission. Employees who are not ready with organizational transformation might face some adversities to adapt changes in the workplace and it will also lead employees to face with stress.

Stress derives from the word of "stingere" which is a Latin word and it means draw tight (Subramaniam, 2004). Besides, a study by Subramaniam (2004) also stated that, Walter Canon is the first individual who suggests that stress can be measured. According to Cartwright and Cooper (1997) the term of stress has been used in the 17th century in order to describe the individual's hardships or affliction. Besides, the word stress can be defined in many ways. Robbins and Judge (2013) refer stress as a dynamic circumstance that will be faced by an individual with an opportunity, demand, or resources that is related to what they desire. In some extent, it also refers to which outcome is perceived as both uncertain and significant.

Besides, both Robbins and Judge (2013) also asserted that, stress is about an unpleasant psychological that occurs to an individual according to the response of the

environmental pressures. It means that, employees who face with stress will commonly feel unpleasant with their work because it affects their psychology in response to the pressure. Stress commonly will exert someone to pressure, strain, forces, and put strong effort toward certain matter which might affect their mental and physical. In addition, an article by Idris (2011) highlighted strain as an affective reaction that felt by the employee when they are depleted of the emotional resources and lack of energy in order to face with the complexity of the works. Also, Subramaniam (2004) indicates that, stress or strain occurs when there is an internal force of the environment (load) that gives pressure to an individual.

Whilst, this study defined “workplace” as a place that employee does a job work based on vision and mission which have been specified. This study also defines stress as an employee's reaction to a certain matter that affects their behavior and psychology. Workplace stress may cause a serious impact to both organization and employee. Employees who are suffering with stress might affect their work productivity and performance, and at the same time it also might influence the organization productivity and performance when employees are not capable to give commitment to their assigned work. A study by Bickford (2005) has proven that, workplace stress affects the employee's well being and health, and it also gives a negative impact on workplace profits and productivity. Based on workplace stress context, this study is focusing on both work stressors and techno-stress that affect the employee's behavior and psychology in order to put their full commitment to change in the organization. Hence, this study focused on five dimensions for each factor that contributed to the employee's commitment to change in the organization.

Work stress is a common phenomenon that always occurs in today's organization which can affect the employee's behavior such as dissatisfaction, demotivation, absenteeism, reduce productivity and so forth. According to Malaysian Psychiatric Association (2009 as cited in Jasmani & Abdul Jumaat, 2011) work stress can be classified an awareness which employees are not capable to cope with the demands of their work environment that is related to negative emotional responses. Likewise, Marzabadi and Tarkhorani (2007) pointed out that, work stress also can be considered as something that is harmful for the employee's physical and emotional reaction. It occurs when the requirement of the certain task or job is not matched with the capabilities, resources or needs of the employees. However, this study defines work stress as the risks and harmful factors that might affect employee's physical and emotion due to the lack of knowledge, skill and ability in order to respond to the demand of work.

Work stress is experienced by all the organizations and members because every matter in the organization that leads to the pressure can be considered as a work stress. According to Larson (2004) the work stress terminology is interchangeably used with occupational stress or job stress, but it brings the same meaning for all these words. An article by Jasmani and Abdul Jumaat (2011) stated that, the research of the work stress has been a significant context in the study of employee's reaction to their work environment. It was supported by other studies that work stress has become as the most essential health and safety issues in the organization which affect the area of the organizational cost (Huda et al., 2004).

Besides, Huda and colleagues (2004) also stressed that work stress is one of the major factors that contributes either directly or indirectly to death. According to WHO (2003) the work stress commonly will affect the employee's unusual and dysfunctional behavior at the workplace and it also might lead the employees to a poorer physical and mental health. This is because, employees who highly experience the work stress will basically be infected with cardiovascular diseases, musculoskeletal disorders and psychological illness (Huda et al., 2004).

According to Rashid and Zhao (2010) there are many researches on the work stress that associated with organizational change, however, there are still gaps and limitations on research regarding the impact of work stress in the context of employee's commitment to a change. Due to the fact, the researcher takes the opportunity to examine and identify the effect of the work stress to the employee's commitment to a change. This study focuses on the three roles stressor (role overload, role ambiguity and role conflict), organizational constraint and interpersonal conflict. The previous researchers stressed that, they agree that role stressors are comprised of three separated roles, but each role relatedly constructs (Idris, 2011; Peiro et al., 2001).

As stated by Idris (2011) a role stressor such role overload, role ambiguity and role conflict is experienced by an employee because of the organizational and job-specific factors such as high level of job demands and constraints that have been given to them. Thus, in the following section, this study discusses about the five dimensions of the work stress (role overload, role ambiguity, role conflict, organizational constraint and

interpersonal conflict) that commonly affect the employee's behavior and emotion in the workplace.

2.3.1 Role Overload

Role overload is about employee's perception about their job demands that exceed their knowledge, skill and ability in order to fulfill their work requirement successfully. According to Hecth (2001) role overload occurs when employees lack the adequacy of the resources, including time and energy that hinder the employee to comply with the demand of work or role expectations. Besides, Yunus and Mahajar (2011) relates role overload to the excessive duties or responsibilities which employees need to do in the workplace.

Employees who experience too many duties in the workplace might feel the pressure. They need to finish all the tasks assigned within a short time and need more energy to achieve the demand of work. Typically, employees who face this situation might be burdened with their work because they need to achieve the demands of the organization in line with the specified goals.

In other views, role overload is about the incompatibility between work demand and time available in order to meet the demand of the work duties in a given time (Barling, Kelloway and Frone, 2005). Thus, role overload will lead employees to bare with pressure and burdens because he or she needs to comply with the role expectations and demand of duties.

2.3.2 Role Conflict

According to Idris (2011), role conflict is an incompatibility of both demands and expectations that are linked to the roles. This is because, role conflict might appear from the various of sources such as the requirement of the different roles. It might also give the pressure to an individual in order to balance their time to different task or duties. However, sometimes it also might occur according to the various strains that engaged to the multiples of roles (Lenaghan & Sengupta, 2007). Hence, this study defines the role conflict as an individual who is currently engaged with two or more duties and roles at one time. This situation can give them the pressure or strain when they are not able to handle the different resources.

2.3.3 Role Ambiguity

Role ambiguity is a circumstance which is faced by employees in the workplace, when they receive vague information about their duties. Role ambiguity can also lead to anxiety when employees receive unclear or inconsistent guidance from the leaders. An employee who does not receive clear roles about their work might face uncertainty in their workplace, because they are not able to perform well in their work due to unclear information. According to Idris (2011) role ambiguity arises when employees do not have a clear authority or knowledge in order to perform their assigned tasks. Whilst, role ambiguity refers to a circumstance that employees are not receiving a clear feedback from others regarding specific information which is associated with their duties and work role requirement (Ahmady, Changiz, Masiello & Brommels, 2007; Jasmani & Abdul Jumaat, 2011). Also, research by (Burney and Widner, 2007; Marginson, 2006;

Yun, Takeuchi, and Liu, 2007) stated that, role ambiguity is caused by lack of the information regarding goals, condition in the working environment where the work are performed, accountability, and the obligations of an individual to perform his or her job effectively.

2.3.4 Organizational Constraints

Organizational constraints refers to the lack of the supplies, poor equipment, inadequate assistance from the internal (members of the organization), barriers in the workplace that commonly threaten the resource depletion and individual personal investment is not compensated (Best, Stapleton & Downey, 2005, p. 442; Liu et al., 2010). In addition, according to Liu et al., (2010) there are various types of resources that lead to the organizational constraints. It shows that, lack of organizational resources can give a negative impact to the employees because it may interfere their work progress due to the absence of the required resources. Therefore, in this study, the researcher defines organizational constraints as the lack of the organizational resources such as people, data, and things that might give employees pressure or strain.

2.3.5 Interpersonal Conflict

According to Beheshtifar and Zare (2013) interpersonal conflict is also known as a social conflict which exists when one's party and others are involved in the project because of the interest. Besides, interpersonal conflict can be defined as a conflict that arises between two or more individuals that currently work together in groups or teams (Beheshtifar & Zare, 2013). Further, according to Spector and Jex (1998) interpersonal

conflict is commonly regarded disagreement between individual with another, sometimes it happens due to a poor treat from a person to others at work.

In addition, Spector and Jex (1998) stressed that; someone may be overt or covert in order to create the interpersonal conflict. For instance, they can be rude to co-workers (overt), and sometime, they will also spread the rumors about the co-workers (covert). This kind of conflict will create a negative work behavior among the employees when they cannot tolerate to each other in certain matters. Next, individual differences (personalities, culture, values, perception and others) also might lead to the interpersonal conflict at work. This is because, in line with the globalization changes, most of the organization has faced a workforce diversity which comes in several of backgrounds.

Moreover, according to Beheshtifar and Zare (2013) interpersonal conflict also occurs due to the individual differences in goals, expectation, values, ideas or opinion and suggestion in order to handle a situation that are unavoidable. Thus, this study defines the interpersonal conflict as a disagreement, dispute or a situation that leads the employees to feel that they are threatened by others in order to gain the specific goals or interest.

2.4 The Conceptualization of Technostress

The innovation of the information communication technologies (ICTs) has been affect to both organizational environment and human social. Broadly, ICTs involve instant

messaging, video conferencing, internet, voicemail, phone, and other works that are related to the technologies. A study by Walz (2012) shows that the term technostress was coined by Craig Brod, who was a clinical psychologist in 1984, he describes technostress as a modern disease that is faced by individuals because of inability to deal or cope with the ICTs phenomenon in a healthy manner.

Next, according to the study by Ibrahim, Yusoff, and Othman (2014) the boom of the technology advancement since two decades ago has attracted the researcher to study about this issue deeply. The term of technology can be referred as a system advancement such as software, hardware, and other applications that are related to the technological systems (Coover, Thompson and Craiger (2005). It also has transformed the way of work and until now this technology has not shown any sign of abating yet (Coover, Thompson and Craiger (2005). But, it is not easy to get along with the updated technology, because from time to time, it is rapidly upgraded in line with the globalization changes. This may cause, some complexities to those who are not capable to cope with the new ICT and this situation will lead them to the technostress.

In a simple word technostress is about the pressure or strain that faced by the individuals due to the sophistication of information communication technology (ICT). Based on the previous studies, pressure or strain that is caused by the technology can be called as technostress (Kupersmith, 2006). Yet, technostress can be identified as any negative effects that influence someone's behavior, thought, attitude and psychology as a result of using the computer-based ICTs (Ibrahim, et al., 2014; Tu, et al., 2005). Besides, based on other studies, technostress is defined as a modern disease that is experienced by the

employees because of the inability to commit with the new technologies in a healthy manner (Ahmad et al., 2014; Ibrahim, et al., 2014; Lapinas, 2015; Wang & Shu, 2008).

Technology rapidly changes. Therefore, people need to be updated according to the current situation in order to adapt to the new updated technologies. Besides, an individual inability to adapt to ICTs can be considered as technostress (Ayyagari, 2012). Moreover, individuals who possess poor knowledge, skill and abilities about the technology innovation, it might lead them to negative behaviors such as lack of motivation, satisfaction and performance. Individuals get into these circumstances because they face a high level of pressure or strain about technology in the workplace.

So, in the next part, this study provides five categories of stressor dimensions that are related to technostress which adopted from Tarafdar et al., (2007). The dimensions are techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty. Therefore, there are many definitions regarding technostress from previous researches, and this study defines technostress as a pressure or strain that is faced by the employees when they are not capable to cope or use the information communication technologies (ICTs) effectively and efficiently.

2.4.1 Techno-Overload

Techno-overload is encumbrances of information technology that exceed the usual level requirement which might cause individuals into strain and stress when dealing with the crowded information communication technologies (ICTs). Beside that, according to Tarafdar et al., (2007) techno-overload is a situation where a leader who inclines to

communicate more information than it should be and to obtain more information that can be effectively processed and used. The overload of the information that is engaged with the technology might affect employee to strain and stress.

This circumstance might affect strain (e.g., eye strain, backaches, headaches, neck pain, joint pains and so forth) to the employees when they stay too long in front of the computer in order to handle the workload. Besides, a study by Karr-Winiewski and Lu (2010) describes technology crowded as a phenomenon that arises when a marginal addition of new information technology has exceeded the points of diminishing marginal returns. The exceeding of technology marginal points is referred to the system feature overload, communication overload and information overload that arise in the organizations. Therefore, in the context of this study, researcher views the techno-overload as a situation or phenomenon that affects the employee's behavior, attitude, physical and emotion due to the exceeding of the optimal level of information technology in the workplace.

2.4.2 Techno-Invasion

Techno-invasion is defined as a situation where individuals feel that he or she cannot be escaped from the technology because they think that they are under surveillance and their lives have been conquered or overrun by the technology (Tarafdar et al., 2007). Next, Tarafdar et al., (2007) summarizes that techno-invasion is an invasive effect of ICTs that basically creates the situation where the individuals can reached at any time. He or she needs to be constantly connected to the technology, and at the same time faced the blurring between both individual work-related and personal contexts. This means

that, employees who are in this situation commonly will be faced with pressure or strain because they are constantly connected to the technology which directly affects their personal social lives. Thus, this study refers to techno-invasion as a situation where the employees are conquered by the technology as they need to constantly stay connected with technology and can be reached at any time according to the situation which may disturb their social lives.

2.4.3 Techno-Complexity

The new innovation of ICTs might lead employees to face the intricacy because they need to learn something new about the technology due to the time changing. Techno-complexity can affect the technology users to spend more time in order to learn and understand the ICT in proper ways (Tarafdar, et al., 2007). Besides, the complexity of technology might impact individual's behavior, attitude and psychology when they are not exposed to the technology development. Hence, based on the techno-complexity context, this study agrees with the definition provided by Tarafdar et al. (2007) that techno-complexity is about the employee's inadequate of the knowledge, skills and abilities (KSAs) in order to use the technology, that force them to spend time, effort and willingness to understand the technology innovation from the various aspects.

2.4.4 Techno-Insecurity

Techno-insecurity reflects the feeling of threats that is faced by employees regarding their current job that will probably be given to others who are more expert and possess better knowledge, skills, and abilities about technology compared to them (Tarafdar et al., 2007). This situation could impact employee's emotion and attitude when they

realize that their colleagues have extra skills and knowledges on how to deal with new technology innovation at workplace. Typically, employees who feel insecure basically think that they will lose their job and not to mention it will cause them to have low self-esteem and lower motivation. In the same manner, Walz (2012) defined techno-insecurity as a situation where the individual feels threatened about losing their works to other people. This situation commonly happens to adult workers who are not expert in technology compared to younger workers.

2.4.5 Techno-Uncertainty

The continuous upgrading and changes of the ICTs according in the globalization change can be defined as techno-uncertainty. The updated technology in an organization might give impact to the employees when they need to upgrade their knowledge about the new technology. Besides, Tarafdar et al., (2007) described techno-uncertainty as a situation that arises when technology is upgraded or updated with new information, applications or functions in order to enhance the ICTs system. In addition, the change of technology or the upgrade in the organization boost the employees who face the intricacy that might lead them to the pressure at the workplace. Thus, both organizations and employees should be alert and always keep updated about the current technology innovation.

2.5. Eustress Vs. Distress

According to Anderson and Pulish (2001) a good stress or a positive stress is basically desirable for various of reasons but not for the negative stress. However, both of stress can affect to the organizational dysfunctional consequences due to the changes of the work habit by the employees. As stated by Fevre, Kolt and Matheny (2006) the concept of eustress is essential in any discussion that is related to the stress, especially regarding work stress that is faced by the employee. The interventions have also been created in order to relieve or reduce the work stress in an organization. According to the previous researches, the positive stress or good stress can be called as eustress (Kupriyanov & Zhdanov, 2014). Beside that, eustress also can be referred as a positive psychological response to a stressor or strain that is faced by the individuals (Nelson & Simmons, 2003; Rothmann & Jordaan, 2006). Individuals who see pressure or strain as a good presence, they will commonly have high enthusiasm to engage in any situations at workplace even though it might give them pressure.

Eustress is about the pleasurable reaction of an individual to the pressure, where it also can be a positive discrepancy between the individual's perception and desire about something (Fevre, et al., 2006). The positive stress basically will help the employees to perform better in their duties and increase their commitment to the organization, even there are conflicts that need to be faced by them (Jarinto, 2010).

In contrast, distress is known as a negative stress that might impact to the organizational inefficiency (Jarinto, 2010). Distress commonly affects the employees's emotion to feel

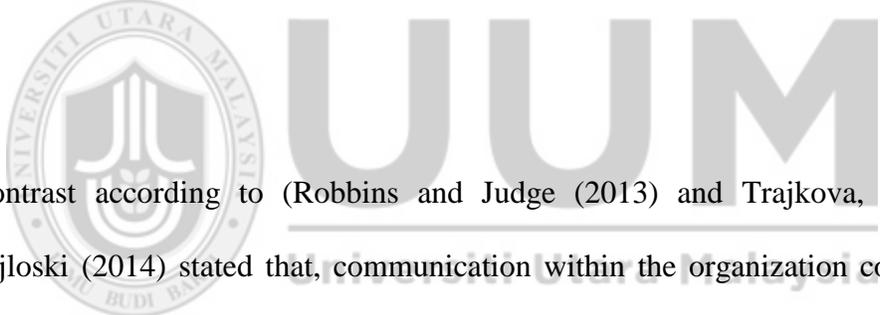
more conflict at work. As stated by Anderson and Pulich (2001) a negative stress usually causes the organization with high level of turnover rate, decrease the productivity of work, increase in absenteeism among the employees because of sickness and increment in costs of health care. Besides, a study by Mirowsky and Ross (2002) stated that those who face with distress commonly will experience the emotional suffering which is known as depression (lost interest, sadness, hopelessness) and anxiety (restlessness and feeling tense). This means that, pressure or strain can affect an individual's emotion when they are not capable to cope with the work environment that require them to meet the goals beyond their work effort.

2.6 The Conceptualization of Internal Communication

Based on the organizational context, communication is a process of verbal and non-verbal that are used to exchange the information between individuals and other within an organization. According to previous studies, communication is referred as a process of sending, receiving and the understanding the meaning of the information or resources (Ergen, 2010; Scott, 2005). It was supported by the current researchers Robbins and Judge (2013) that the term of communication can be described as a process of sending the information or sources (sender) through a medium or channel to the receiver.

As pointed out by Jones, Wilson, Gardner and Gallois (2004) communication is an essential factor in the process of planning and implementing change. Moreover, Goodman and Truss (2004) indicated that communication has become as an essential source in helping the members of the organization to understand and learn about new

things or needs in line to meet the organizational vision and mission. According to Men (2015) the significance of the internal communication cannot be overemphasized in order to achieve the business success. Besides, good internal communication in an organization might influence the employees to enhance their performance and productivity to the achievement goals and at the same time might give the positive effect of organization by gaining mutual benefit. Scott (2005) asserted that, there are two types of communication in the workplace that are effective communication and efficient communication. Effective communication occurs when an individual's (sender) message has been successfully decoded by the other person (receiver), while, the efficient communication occurs when conversation between parties is done effectively at a low cost.



In contrast according to (Robbins and Judge (2013) and Trajkova, Andonov and Mihajloski (2014) stated that, communication within the organization consists of four directions of communication flows; (1) vertical flow of communication which the communication that occurs between managers and employees, (2) horizontal flow of communication that occur between co-worker that work in different or same unit or department which is equal in status, (3) lateral or diagonal flow of communication occurs between employee in different level of hierarchy and communication between employee who are in different department of unit in organization and (4) informal flow of communication basically allow the informal transmission of information among the employees. Thus, in this context of study, it views internal communication as a process of sending formal and informal information or sources that occurs within the

organization in order to achieve the organizational requirement during the organizational change.

2.7 Underpinning Theories and Model

In this study, the researcher has applied one theory and two models in order to generate knowledge and understanding the link of the theoretical and variables of the study. Social Exchange Theory includes Lewin's Three-Step Change Theory and Schein's Three- Stage Model of the change process were used by the researcher in this study. In addition, the usage of the theories and model was to relate the discovery of the study with the theory in order to contribute to the empirical evidence.

2.7.1 Social Exchange Theory (SET)

According to the Wikhamn and Hall (2012), some of the organizational researcher used the Social Exchange Theory (SET) in order to motivate employees to give their commitment to the organizations. Social Exchange Theory (SET) is known as the most influential theory in order to understand the workplace behaviour (Cropanzano & Mitchell, 2005). Cropanzano and Mitchell (2005) stated that, Social Exchange Theory (SET) enhances the human relationships over the time into the trusting, loyal, and mutual commitments. The Social Exchange Theory (SET) can be referred as a process of exchange between parties upon the negotiation (Cropanzano & Mitchell, 2007). Besides, Social Exchange Theory (SET) also has been proved by the previous researchers as one of the theories that involved a series of interaction that are

interdependent in order to enhance the social relationship and generate an obligation among the members of the organizations (Cropanzano & Mitchell, 2005; Wikhamn & Hall, 2012). Basically, Social Exchange Theory (SET) was found to be used in such disciplines for instance, anthropology, social psychology, and sociology (Wikhamn & Hall, 2012; Zafirovski, 2005).

Basically, a better communication from within can lead both organizations and employees to meet the vision and mission of the organization. As stated by the Trajkova, et al. (2014), the usage of internal communication based on four directions of communication flow; (1) vertical flow of communication, (2) horizontal flow of communication, (3) diagonal (lateral) flow of communication and (4) informal flow of communication. These communication flow commonly can become as a social exchange element where leaders can use the negotiation concept to communicate and convince with their employees in order to give full commitment to change even there have some adversity that need them to face to cope with changes. Besides, through the internal communication, the social exchange theory also can help leaders to motivate their employees by communicating the relevant ideas and thought regarding changes to the employees. So, this way can help the organization to influence and convince their employee to put a total commitment to change even though they confront with difficulties due to change at the workplace.

Even though, work stressors and technostress affect the employee's commitment to change, but the exchange concept in social relationship between employer and

employees through the excellent internal communication in the workplace can lead the employees to feel more committed and motivated toward their work. Moreover, when there is useful information communicated by the upper management regarding changes in the organization, employees basically will be more motivated and attracted to change when they believe that change was not only a good strategy for the organization but also benefit themselves. For instance, employees will get the outcome of the changes that is implemented by the organization such as benefit or rewards based on the work knowledge, skills and abilities that are related to changes. In conclusion, Social Exchange Theory is the process of the exchange that occurs between the employer and employees in the workplace.

2.7.2 Lewin's Three-Steps Change Model

According to Lim, Werner and Desimone (2013) model of change process explains the dynamic regarding the improvement and change that takes place in an organization. Lewin (1951) had argued that successful change in an organization was depends on the three-step of change, which are (1) unfreezing, (2) movement (3) and refreezing. According to Lewin (1951) at the first step of change process called unfreezing that involved a process of getting the people to accept a fact that change could not be avoided and to stop even though by resisting to it.

The second step is called movement, where at this stage people need to accept something new or desire based on change, for instance, new policies and practices in organizations. This is because, when the organization is implementing our restructuring, new policy and procedure in the organization, the employees must follow and obey

whether or not they accept it. Then, the last step is called refreezing which basically involves the making of new practices and individual's behaviours that are aligned to the permanent part of the operation or individual's role expectations. Figure 2.1 illustrated the Lewin's Three-Step Change Model.

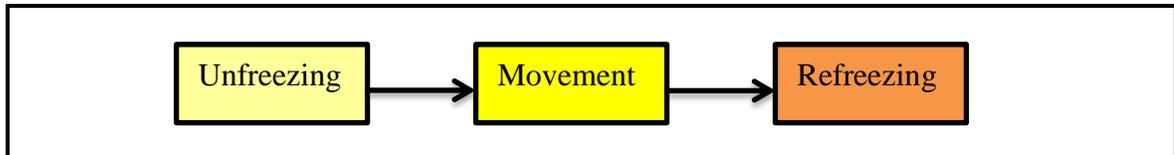


Figure 2.1
Lewin's Three-Step Model

On the other hand, Robbins and Judge (2013) have defined the Lewin's Three-Step Model by saying the unfreezing as a situation that occurs to overcome the pressure between the one's resistance and group conformity. Next, movement of change is referred as a process of change that is convertible the organization from status quo to a desired end state. Then, the last process of Lewin's Model was the intervention to stabilizing the change by focusing on balancing driving and restraining forces which is also called refreezing. But, according to Armenakis, Harris and Field (1999) these three steps also can be known as readiness, adoption and institutionalization. A study by Kritsonis (2005) indicated that Lewin was a social scientist who viewed human behavior as a dynamic balance of forces by an individual who are working in the opposing directions. This is because, driving forces basically will facilitate the change because the organization can push employees in the desired directions (Kritsonis, 2005).

Based on the context of this study, researcher has applied the Lewin's Three-Step Model in order to enhance the employees' commitment to change in the workplace. In order to implement change, organization needs to make a little research regarding what change is needed to and then, the organization can refer to the Lewin's Three-Step Model to convince and influence the employee to change. Even though, the work stress and technostress lead the employee to resist to not giving commitment to change, but by applying this model organization is able to influence the employees. The internal communication can be used as a medium between organizations and employees in order to achieve the objective of the organizational change. Thus, the Lewin's Three-Step Model is useful to the organization to apply while implementing the change in the workplace, so that, it can enhance the employee motivation to give their full commitment to change.

2.7.3 Schein's Three-Stage Model

Edgar Schein has further delineated of the three change process from the Kurt Lewin by focusing on the dynamic of individuals change and how a change agent as an intermediates in order to assists and managing change in successful (Lim et al., 2013). Even though, Schein has used the same model as Lewin but Schein has come out with different ideas based on the three change process. According to Schein (1987), at stage 1 (Unfreezing), change agent needs to play their role by motivating the employees in order to accept change by disconfirming individual's behavior, attitude or performance.

Next, at stage 2 is regarding changing through cognitive restructuring. As stated by Schein, at this stage, change agent needs to emphasize employees to see and do things

differently and make them believe that by changing the work habits it will help to enhance their work performance. Finally, at the stage 3 (refreezing) the change agent needs to assist the employees to integrate the new behavior which work habits into the employee's thought pattern.

The role of change agent was very significant in order to convince and influence the employee to accept change in the organization. The change agents can be someone from the top management of an organization where he or she needs to play their role to help and motivate to give the commitment to change. The organization as the change agent can help the employee by communicating to them about the importance of change or transformation that implemented in the organization so that, employees can give their full commitment even faced with work stress and technostress.

Even there have three theories that used in this study to generate knowledge and understanding regarding variables of this study, the most nearest theory to this study is Lewin's Three-Step Change Model which can be related to the employee commitment to change in order to enhance the employee motivation and productivity at the workplace.

2.8 Hypothesis Development

2.8.1 Work Stressors and Employee Commitment to Change

Work stress is not a new phenomenon in today's businesses. Work stress commonly occurs when employees are forced to do something over their limit that lead them to feel dissatisfied with their job, low in motivation and morale, reduce in their work

performance and other things that lead them to pressure and strain. Besides, the changes in the workplace also might contribute the employee toward the work stress. This is because, not all the employees would easily accept and adapt with the new transformation or restructuring that implemented in their organization.

Besides, according to Jones and Bright (2001) work stress is interrelated the increment of the negative work-related outcomes such as low in productivity, ill-health and job dissatisfaction among the employees. This circumstance can lead to negative effect of the organizational transformation when employees are not ready to give their commitment to the change when they are highly affected by the pressure of work. Previous studies revealed that, there was a positive relation between work stress and employee's commitment to change (Bramble, 2013; Malik et al., 2010; Mohammadian & Amirkabiri, 2014; Wells et al., 2009). In contrary, it is proven that there is negative correlation between work stressor and commitment to change (Hamidi & Khatibi, 2009; Lambert & Hogan, 2009). In another view Somers (2009) found significant relationship between work stress and affective commitment and normative commitment. However, there is no interrelated relationship between work stress and continuance commitment. In contrast the study by Malik et al. (2010) found there is negative relationship between role overload and role conflict on affective commitment to change.

Hence, in this study, the researcher focuses on the five dimensions of work stressors (role overload, role ambiguity, role conflict, organizational constraints and interpersonal conflict) that are contributed to the employees toward affective commitment, continuance commitment and normative commitment to change in the organizations. As

stated by Malik et al. (2010) three of the occupational role stressors (role overload, role ambiguity and role conflict) are highly related to each other even though they refer to different meanings. Typically, the transformation and restructuring that occurs in an organization might affect the organizational structure, policy and procedure and employee's work scope, such as changes in the job description and job specification in order to raise the vision and mission of the organization.

According to Bramble (2013) occupational roles are the crucial impacts that need to be given a serious attention by the organization because it may increase the counterproductive of work behaviour while reducing the employee's commitment and performance. If there is too much work at one time and vague information regarding duties, employees might be affected with depression, fatigue, anxiety, and several other health-related problems (Bramble, 2013). This is because, according to Kaselyte and Malukaite (2013) role overload, role ambiguity and role conflict typically will lead one to face symptoms of stress, which may reduce their work satisfaction and willingness to commit to change that have been implemented to the organization.

Indeed, as pointed out by the previous researches, conflict leads to the anxiety and pressure among the employees when it negatively influences their behaviour and attitude (Kassim & Ibrahim, 2014; Nizam, 2011). Basically, interpersonal conflict arises when there is a struggle and competition between the members in the organization with differing needs, values, goals and beliefs (Kassim & Ibrahim, 2014). According to Nair (2008) employees are failed to give commitment to the organization whenever conflict exists. This is because; a conflict that exists between individuals, group, or teams usually

will minimize the mutual understanding and will lead to the reducing of the employee commitment to change due to the misunderstanding.

Hence, the interpersonal conflict is interrelated to the employee commitment to change. Further, Kassim and Ibrahim (2014) stated that, the disagreement between the diverse workforces during the organizational changes can lead to the difficulties there are different generations, genders or level of workers who use their own ways or style in order to solve the problem arises. This situation might affect employee's commitment to change when they face conflict and stress during the organizational changes. However, if the issues of interpersonal conflict in an organization are well managed, it can enhance their commitment to change.

Besides, lack of the sources in the organization such as lack of equipment and lack of person help can lead to the negative employee commitment to change. This is because; the poor of the supplies and office equipment would interrupt the employee working progress and at the same time might reduce the employee motivation, performance and productivity. The innovation in an organization is significant in order to keep the organization active and growing (Manimala, Jose & Thomas, 2006). Thus, based on the empirical evidence, the proposed hypotheses for this study are:

H_{1a}: There is negative relationship between role overload and employee's affective commitment to change

- H_{1b}: There is negative relationship between role conflict and employee's affective commitment to change.
- H_{1c}: There is negative relationship between role ambiguity and employee's affective commitment to change.
- H_{1d}: There is negative relationship between organizational constraints and employee's affective commitment to change.
- H_{1e}: There is negative relationship between interpersonal conflict and employee's affective commitment to change.
- H_{1f}: There is negative relationship between role overload and employee's continuance commitment to change.
- H_{1g}: There is negative relationship between role conflict and employee's continuance commitment to change.
- H_{1h}: There is negative relationship between role ambiguity and employee's continuance commitment to change.
- H_{1i}: There is negative relationship between organizational constraints and employee's continuance commitment to change.
- H_{1j}: There is negative relationship between interpersonal conflict and employee's continuance commitment to change.
- H_{1k}: There is negative relationship between role overload and employee's normative commitment to change.

H_{1j}: There is negative relationship between role conflict and employee's normative commitment to change.

H_{1m}: There is negative relationship between role ambiguity and employee's normative commitment to change.

H_{1n}: There is negative relationship between organizational constraints and employee's normative commitment to change.

H_{1o}: There is negative relationship between interpersonal conflict and employee's normative commitment to change.

2.8.2 Technostress and employee commitment to change

Technological momentum has broadly increased far beyond user expectation. Technology is changing from time to time. People need to be alert with every single change regarding the information and communication technology (ICT) in organization by putting their full commitment on that. According to Laspinas (2015) the revolution of the technology does not only improve the efficiency and productivity of the organization, but also assists to lessen the predicament of tediousness in the workplace. This is because, advancement of technology help employees to be more faster and efficient in doing their duties. In addition, the rapid pace of the newest technology innovation has caused trouble to the businesses, industries, and government in order to initiate the employees toward the reorganized and rationalized (Laspinas, 2015). Besides, according to Ahmad, Amin and Ismail (2009) the technology change has brought a lot of changes in the workplace nowadays.

Study by Ahmad, Amin and Ismail (2012) stated that there is a negative relationship between technostress and commitment. On the other hand, other studies such as Meyer and Allen (1991) asserted a negative is associated between technostress and commitment. However, there is still lack of evidence based on the empirical studies on the relationship between technostress and affective commitment, normative commitment and continuance commitment to change. This is because, the previous study such as Ahmad et al. (2012) only focused on the relationship between technostress and commitment without considering each of the dimensions of commitment to change with the technostress.

Mostly, the researchers from the previous studies specifically focused on organizational commitment and job stress (Dale & Fox, 2008; Lee & Jamil, 2003; Omolara, 2008; Tu, Ragu-Nathan & Ragu-Nathan, 2001; Vokala, & Nikolaou, 2005). Next, based on the study by Omolara (2008) stated that employees who possess a lower level of stress in the workplace are commonly more committed to get along to achieve the goals and vision of the organization. It means that, the employees who are not influenced by technostress commonly will show high levels of commitment toward the new technology advancement in the organization in order to accomplish the goals of the organization. It was supported by Meyer and Allen (2004) who says that employees with a high level of affective commitment, normative commitment and continuance commitment to change are commonly committed and tend to perform well to accept new environment. It means that, employees who successfully adapt on these three dimensions of commitment to change tend to accept it because they “want to”, “ought to” and “have to do so” in order to achieve the organizational mission and vision

In addition, technology advancement has the capability to increase the pace of duties among the employees and needs them to produce more outputs within the shortest time (Ahmad et al., 2009). This situation leads the employees to feel stressed that might affect their work's behaviour and attitude in order to give commitment to change that have been implemented in the organization. On the other hand, technology also leads the employees to face with work overload where they need to work faster in order to finish up all the assigned tasks which known as the techno-overload (Ragu-Nathan, Tarafdar, Ragu- Nathan & Tu, 2008). Besides, the techno-invasion needs employee to connect to technology at anywhere and anytime that will lead the employees to feel uncertainty in their social lives (Ragu-Nathan, Tarafdar, Ragu- Nathan & Tu, 2008). This is because they need to sacrifice their social lives with their family and personal time to spend more time for their work even outside of the organization. Next, the advancement of the technology in the organization also leads to the techno-insecurity where the employees feel insecure with others who are more knowledgeable in technological innovation (Melchionda, 2007).

In addition, there are also the techno-uncertainty and techno-complexity that lead the employee to the work stress. Techno-complexity commonly forces the employees to upgrade their knowledge, skill and abilities (KSAs) in order to adapt to new information and communication technology (ICT) in the organization. Next, techno-uncertainty always makes employees to put their effort and cope with the new application. According to the Ahmad et al., (2009) stress might inversely impact on the employees' commitment to change, so, they concluded that there is a negative correlation between

technostress and employee's commitment to change. Thus, based on the empirical evidence, the proposed hypotheses for this study are:

H_{2a}: There is negative relationship between techno-overload and employee's affective commitment to change.

H_{2b}: There is negative relationship between techno-invasion and employee's affective commitment to change.

H_{2c}: There is negative relationship between techno-complexity and employee's affective commitment to change.

H_{2d}: There is negative relationship between techno-insecurity and employee's affective commitment to change.

H_{2e}: There is negative relationship between techno-uncertainty and employee's affective commitment to change.

H_{2f}: There is negative relationship between techno-overload and employee's continuance commitment to change.

H_{2g}: There is negative relationship between techno-invasion and employee's continuance commitment to change.

H_{2h}: There is negative relationship between techno-complexity and employee's continuance commitment to change.

H_{2i}: There is negative relationship between techno-insecurity and employee's continuance commitment to change.

H_{2j}: There is negative relationship between techno-uncertainty and employee's continuance commitment to change.

H_{2k}: There is negative relationship between techno-overload and employee's normative commitment to change.

H_{2l}: There is negative relationship between techno-invasion and employee's normative commitment to change.

H_{2m}: There is negative relationship between techno-complexity and employee's normative commitment to change.

H_{2n}: There is negative relationship between techno-insecurity and employee's normative commitment to change.

H_{2o}: There is negative relationship between techno-uncertainty and employee's normative commitment to change.

2.8.3 The Moderating Effect of Internal Communication on Relationship between Work Stressors and Employee Commitment to Change

Twenty-first century organizations need to move forward its business operation in line with the organizational agendas and strategic planning. Issues will arise in organization if there is no clearer information that communicates by the organization to employees. This is because, it may incline to the misunderstanding due to the unclear information from the management that will affect the employees work progress and their work productivity. The internal communication is very significant in order to solve the conflict that arises in an organization, so that it can influence the employee to give more

effort to change in the workplace. This is because, organization basically relying on employees to create and deliver the products and services of the organization, and at the same time, employees might also face with conflict at work place that may lead them to pressure. The internal communication which starts from within can overcome conflict faced by employees and it can influence them to cope with the change that will implement in the organization.

A qualitative study by the Dolphin (2005) has found that there is interrelated relationship between stress and communication from within of organization in order to develop trust and enhance commitment of employees during change in the workplace. Moreover, as stated by the previous researchers such as Nobeli, McCormick and Hoekman (2013) work stress usually has been cited in empirical study as an antecedent of reduced morale among the employees. Nevertheless, work stress can be surmounted there is a clear communication from the organization to employee regarding changes that will be implemented. This is because, when the organization implements changes in the organization, it will affect the employee's work duties in order to achieve the mission and vision of the organization. As stated by Bovee and Thill (2000) internal communication is a significant mediating between employer and employees in an organization in order to achieve the understanding between each others.

Besides, studies have suggested that, internal communication can be link to the work stress, either as an antecedents, mediating or moderating factors (Margolis and Nagel, 2006; McCarthy et al., 2009). This is because, intervention of the internal communication from within can reduce the employee work stress such as role overload,

role conflict, role ambiguity, organizational constraints and interpersonal conflict among the employees in the workplace. In addition, the intervention of the communication in the organization can enhance the employee to give their full commitment to change that implement in the organization. It was supported by study from Trajkove et al., (2014) that there is a positive relationship between internal communication and employee's commitment to change. It means that, the internal communication can overcome the conflict that occurs in the organization and convince the employees to become more committed to change.

On the other views, work stress can be under control if the aspects of the communication such as openness, supportiveness and direction are applied by the organization in order to enhance the relationship with the employees (Nobile et al., 2013). Having good communication strategies in an organization can avoid negative matter, especially stress, that would affect the organization and employees to conflict. The reduction of the work stress through the internal communication will enhance the employee morale and motivation to get along with new change in the organization. Thus, based on the empirical evidence, the proposed hypotheses for this study are:

H_{3a}: Internal communication moderate the relationship on employee's affective commitment to change and role overload.

H_{3b}: Internal communication moderate the relationship on employee's affective commitment to change and role conflict.

- H_{3c}: Internal communication moderate the relationship on employee's affective commitment to change and role ambiguity.
- H_{3d}: Internal communication moderate the relationship on employee's affective commitment to change and organizational constraints.
- H_{3e}: Internal communication moderate the relationship on employee's affective commitment to change and interpersonal conflict.
- H_{3f}: Internal communication moderate the relationship on employee's continuance commitment to change and role overload.
- H_{3g}: Internal communication moderate the relationship on employee's continuance commitment to change and role conflict.
- H_{3h}: Internal communication moderate the relationship on employee's continuance commitment to change and role ambiguity.
- H_{3i}: Internal communication moderate the relationship on employee's continuance commitment to change and organizational constraints.
- H_{3j}: Internal communication moderate the relationship on employee's continuance commitment to change and interpersonal conflict.
- H_{3k}: Internal communication moderate the relationship on employee's normative commitment to change and role overload.
- H_{3l}: Internal communication moderate the relationship on employee's normative commitment to change and role conflict.

H_{3m}: Internal communication moderate the relationship on employee's normative commitment to change and role ambiguity.

H_{3n}: Internal communication moderate the relationship on employee's normative commitment to change and organizational constraints.

H_{3o}: Internal communication moderate the relationship on employee's normative commitment to change and interpersonal conflict.

2.8.4 The Moderating Effect of Internal Communication on relationship between Technostress and Employee Commitment to Change

The advancement of the information and technology communication (ICT) in today's globalization has affected organization and employees. Work is also changing due to the new technologies (cell phones, laptops, electronic mails, video call, wireless connection and etc.) which have become smaller, cheaper, and generally is easy to access and suitable to use for all types of business.

According to the previous researchers Nobile et al. (2013) stress and internal communication are interrelated to each other. This means that, internal communication can reduce work conflict that relates to technostress (techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty) faced by the employees in the organization. Internal communication can be used as a medium for both employer and employees to spread the information in the workplace. Kitchen and Daly (2002) stated that, internal communication is a key factor that leads to the success of change in the organization. Generally, successful leaders should have excellent communication

skills in order to interact with his or her employees about change and constantly keeps informing about the new information with employees.

Besides, a study by Ahmad et al., (2012) indicates that there is a significant relationship between technostress and commitment to change. Based on that, technology innovation can create stress to the employee in the workplace, but at the same time it can enhance the employee's commitment to changes when there is a better and clearer communication regarding change from the organization. Further, as stated by Ahmad et al., (2012) technology is a tool that is provided in the workplace in order to achieve the organizational effectiveness and efficiency, which will be meaningless if there have no employee to put their commitment and effort to adapt it. Besides, employees who face the pressure or strain due to the technology can use communication medium in order to inform to top management about conflict they are facing. For instance, the employee can ask the matter that they are not clear or ambiguous to their immediate supervisor so that there has a solution for the arisen problems.

The positive feedback from the top management can enhance employee's commitment to change since they understood the vision and mission of change in organizations. According to Trajkavo et al. (2012) in order to influence employees to cope with new technology innovation, the organization can use four directions of the communication flow (vertical communication, horizontal communication, lateral communication and informal communication) to enhance the employee's commitment and to reduce conflict of technostress in their work. Besides, new technology innovation can cause stress due

to employee's inability to cope with the information and communication technology (ICT). The organization should take initiative in order to convince and influence employees to cope with new technology through communication, so that, employees can get a clearer information and explanation from the organization. Thus, the proposed hypotheses for this study are:

H_{4a}: Internal communication moderate the relationship on employee's affective commitment to change and techno-overload.

H_{4b}: Internal communication moderate the relationship on employee's affective commitment to change and techno-invasion.

H_{4c}: Internal communication moderate the relationship on employee's affective commitment to change and techno-complexity.

H_{4d}: Internal communication moderate the relationship on employee's affective commitment to change and techno-insecurity.

H_{4e}: Internal communication moderate the relationship on employee's affective commitment to change and techno-uncertainty.

H_{4f}: Internal communication moderate the relationship on employee's continuance commitment to change and techno-overload.

H_{4g}: Internal communication moderate the relationship on employee's continuance commitment to change and techno-invasion.

H_{4h}: Internal communication moderate the relationship on employee's continuance commitment to change and techno-complexity.

- H_{4i}: Internal communication moderate the relationship on employee's continuance commitment to change and techno-insecurity.
- H_{4j}: Internal communication moderate the relationship on employee's continuance commitment to change and techno-uncertainty.
- H_{4k}: Internal communication moderate the relationship on employee's normative commitment to change and techno-overload.
- H_{4l}: Internal communication moderate the relationship on employee's normative commitment to change and techno-invasion.
- H_{4m}: Internal communication moderate the relationship on employee's normative commitment to change and techno-complexity.
- H_{4n}: Internal communication moderate the effect on employee's normative commitment to change and techno-insecurity.
- H_{4o}: Internal communication moderate the relationship on employee's normative commitment to change and techno-uncertainty.

2.9 Research Framework

Based on the literature review, a theoretical framework was developed in order to review the empirical literature in this study. Figure 2.2 depicts research framework that shows work stressor and technostress as independent variables. Work stressors consists of five dimensions (role-overload, role conflict, role ambiguity, organizational constraints and interpersonal conflict) and technostress also consists of five dimensions (techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty). While, employee commitment to change as a dependent variable which consists of three dimensions which are affective commitment, normative commitment and continuance commitment. Finally, internal communication as a moderating variable.



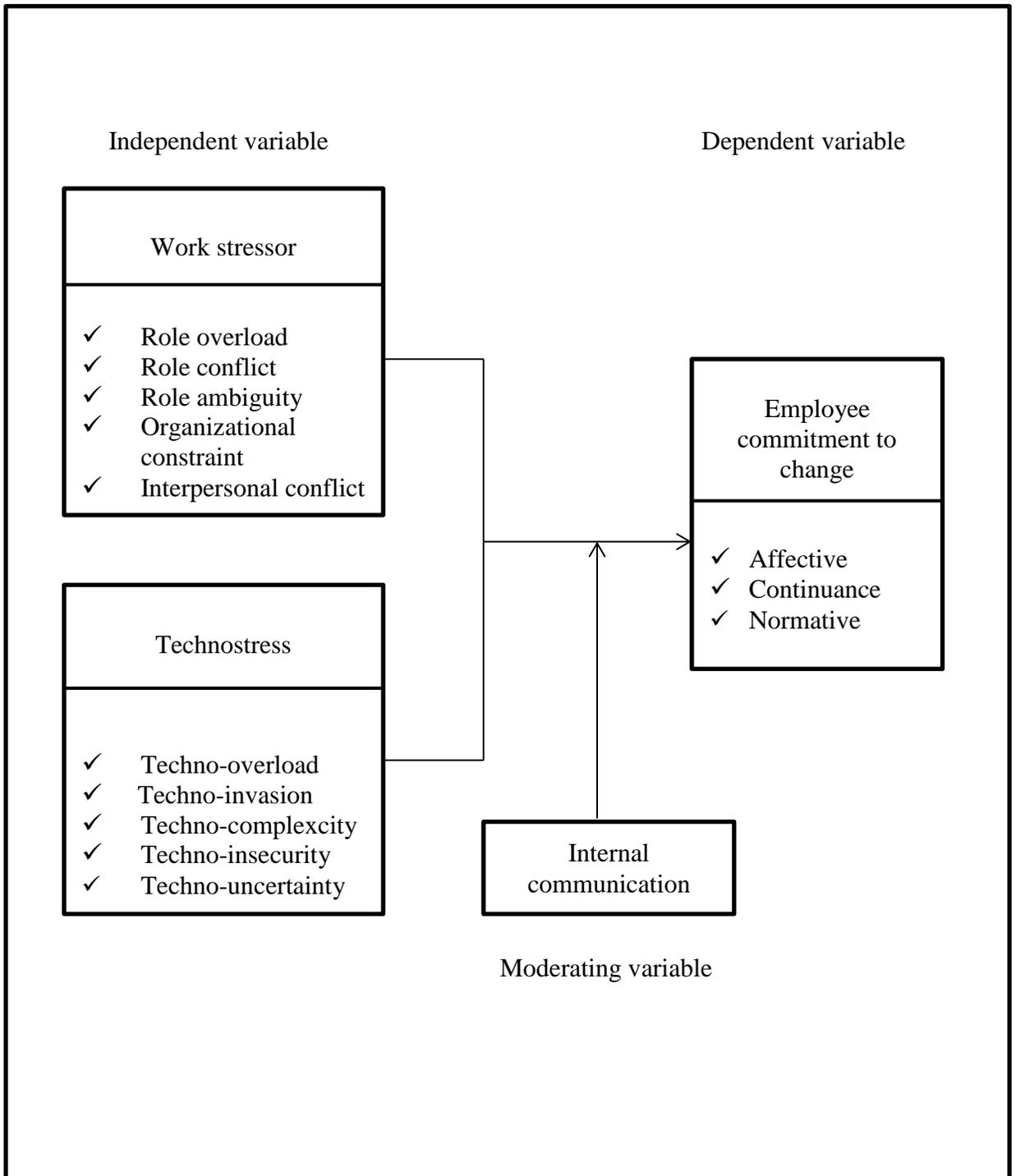


Figure 2.2
Research Framework

2.10 Conclusion of the Chapter

Overall, this chapter discusses the literature review based on the previous empirical studies. This chapter also presents the underpinning theories and model and hypotheses developed for this study. The next chapter discuss the method of the study.



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter involves the research framework, research hypothesis development and discussion about methodology used in this study, it namely research design, population and sampling. Then, follow with instruments used in this study, data collection procedures and the data analysis to examine the effect of the relationship between work stressors (role overload, role ambiguity, role conflict, organizational constraints and interpersonal conflict) and technostress (techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty) with employee commitment to change (affective commitment, continuance commitment and normative commitment), and internal communication as a moderator. Next, this chapter also provide the pilot test of this study. Finally, at the end of this chapter, this study, discuss on the statistical technique used to analyze the data of the study.

3.2 Research Design and Unit of Analysis

The research design is essential in order to examine the type of data, data collection technique and sampling technique in line to achieve the research objectives (Burns & Bush, 2002). The purpose of this study is to examine whether there is a significant and negative relationship between work stressors and technostress on employee commitment to change, and whether the internal communication positively moderate the relationship between work stressors and technostress on the employee commitment to change among the managerial staff (non-academic) at three public universities located in northern region of Malaysia. This study used correlation in nature because the main objective is to examine variables that might affect employee commitment to change. Besides, this correlational study also was conducted cross-sectionally, meaning that all study variables were measured at the same point of time.

Next, relationship between work stressors and technostress (independent variables), internal communication (moderating variable) and employee commitment to change (dependent variable) will be examined by testing the hypothesis. Basically, testing hypothesis can be accomplished by using both quantitative and qualitative techniques (Sekaran, 2003). This study, applied the quantitative technique in order to conduct the data collection, analysis and interpretation. According to Isaac and Micheal (1990) the quantitative method is frequently used in education and behavioral science in order to collect the data.

This study applied a cross-sectional survey design which is questionnaire in order to examine the hypothesis between each variable. According to the Sekaran (2003) the questionnaire is the most crucial tools that used to collect data in quantitative research as the researchers will be able to collect the data from the respondents within a short period of time. The unit analysis of this study based on the individuals and the target population was based on non-academic staff of three public universities in the northern region of Malaysia which were UUM, UNIMAP and UITM Perlis's branch.

3.3 Measurement and Questionnaire Design

The researcher distributed the questionnaires to the non-academic staff to each of three universities in order to gain data needed to test the generated hypotheses for this study. The questionnaires were divided into five (5) sections which comprises of 92 questions with complete written instructions. The first section was about the demographic profile of respondents which comprises of gender, age, status, employment level, job tenure, organizational tenure, status of job appointment and highest academic level.

The second section cover employee commitment to change that consists of three dimensions with 18 items. The third section regarding work stressors which consists of five dimensions with 45 items. The fourth section technostress which consist of five dimensions with 23 items and fifth section on internal communication which consists of 6 items (Table 3.1 and Table 3.2 consist of details variables). Lastly, each questionnaire

is attached with a cover letter from the researcher with the complete written instructions.

This study used two types of the five-point Likert scale that was ranging from:

1 = strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = strongly agree.
and
1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, and 5 = Always.

3.3.1 Employee Commitment to Change

The dependent variable which is employee commitment to change involved of three dimensions which are affective commitment to change (6 items), continuance commitment to change (6 items) and normative commitment to change (6 items) measurement with five-point Likert scale is presented in the Table 3.1. All the instruments adapted from Hercovitch and Meyer (2002).

Table 3.1
Items for the dependent variable (Employee Commitment to Change)

Dimension	Operational Definition	Items
Dependent Variable Employee Commitment to Change	A sense of an individual to support changes in the organization that relates to three dimensions which are affective, continuance and normative commitment to change (Hercovitch & Meyer, 2002).	
➤ Affective Commitment to Change	An individual's desire in order to support change based on their belief about the goal targeted (Hercovitch & Meyer, 2002).	<ol style="list-style-type: none"> 1. I believe in the value of this change. 2. I believe this change is good strategy for the organization. 3. I think management is making a mistake by introducing this change. 4. This change serves an

		important purpose.
		5. Things would be better without this change.
		6. This change is not necessary.
➤ Continuance Commitment to Change	Relate to cost that closely related with failure in order to give support to change (Hercovitch & Meyer, 2002).	<ol style="list-style-type: none"> 1. I feel a sense of duty to work toward this change. 2. I do not think it would be right for me to oppose this change. 3. It would not feel badly about opposing this change. 4. It would be irresponsible for to resist this change. 5. I would feel guilty about opposing this change. 6. I do not feel any obligation to support this change.
		(Adapted from Hercovitch & Meyer, 2002)
➤ Normative Commitment to Change	A change that can be considered as an “ought to”, which individuals must have sense to remain their obligation in order to provide his or her support for the change (Hercovitch & Meyer, 2002).	<ol style="list-style-type: none"> 1. I have no choice but to go along with this change. 2. I feel pressure to go along with this change. 3. I have too much at stake to resist this change. 4. It would be costly for me to resist this change. 5. Resisting this change is not a viable option to me. 6. It would be risky to speak against this change.
		(Adapted from Hercovitch & Meyer, 2002)

3.3.2 Work Stressors

The independent variable which consisted of work stressors with five dimensions which are role overload (10 items), role conflict (10 items), role ambiguity (10 items), organizational constraints (11 items) and interpersonal conflict (4 items) is measured using five-point Likert scale is presented in Table 3.3. The instruments of role overload, role conflict and role ambiguity adapted from Osipow and Spokane (1987) and the instruments of organizational constraints and interpersonal conflict adapted from Spector and Jex (1998).

Table 3.2
Items for the independent variable (Work Stressors)

Dimension	Operational Definition	Items
Independent Variable		
Work Stress	Work stress is considered as something that can harmful the employee's physical and emotional reaction, because it occur when the requirement of the certain task or job are not matched with the capabilities, resources, or need of the employees (Marzabadi & Tarkhorani (2007).	
➤ Role Overload	Role overload is related to the excessive duties or responsibilities which employees need to do in the workplace (Yunus & Mahajar, 2011).	<ol style="list-style-type: none"> 1. At work, I am expected to do too many different tasks in too little time. 2. I feel that my job responsibilities are increasing. 3. I often have too much to do in my job. 4. I have to take work home with me. 5. I have the resources I need to get my job done. 6. I have competent in what I do. 7. I work under tight deadline. 8. I wish I had more help to

deal with the demands placed upon me at work.

9. My job requires me to work in several equally important areas at once.
10. I am expected to do more work than is reasonable.

Adapted from Osipow & Spokane, 1987)

➤ Role Conflict

Role conflict is an incompatibility of both demands and expectations that linked to the roles (Idris, 2011).

1. I feel conflict between what my employer expected me to do and what I think is right or proper.
2. I feel caught between factions at work.
3. I have more than one person telling me what to do.
4. I feel I have a stake in the success of employer.
5. I feel good about the work I do.
6. My supervisor have conflicting ideas about what I should do be doing.
7. I am proud of what I do for a living.
8. It is clear who really runs thing where I work.
9. I have divided loyalties on my jobs.
10. The work I do has as much pay-off for me as supervisor.

Adapted from Osipow & Spokane, 1987)

➤ Role Ambiguity

Role ambiguity is a circumstance that employees are not receiving a clear feedback from others

1. My supervisor provides me with useful feedback about my performance.
2. It is clear to me what I have to do to get ahead.



UUM
Universiti Utara Malaysia

regarding specific information which associated with their duties and work role requirement (Jasmani & Abdul Jumaat, 2011).

3. I am uncertain about what I am supposed to accomplish in my work.
4. When faced with several tasks I know which should be done first.
5. I know where to begin new project when it is assigned to me.
6. My supervisor asks for one things, but really want another.
7. I understand what is acceptable personal behavior on my job (e.g: dress, interpersonal relations)
8. The priorities of my job are clear to me.
9. I have a clear understanding of how my supervisor wants me to spend my work time.
10. I know the basis on which I am evaluated.



UUM

Universiti Utara Malaysia
Adapted from Osipow & Spokane, 1987)

➤ Organizational Constraint

Organizational constraints referred to the lack of the supplies, poor equipment, inadequate assistance from the internal organization, barriers in the workplace that commonly threaten the resource depletion and individual personal investment is not compensated (Liu et al., 2010).

1. How often do you find it difficult or impossible do to your job because of the poor equipment or supplies?
 2. How often do you find it difficult or impossible do to your job because of the organizational rules and procedures?
 3. How often do you find it difficult or impossible do to your job because of other employees?
 4. How often do you find it difficult or impossible do to your job because of lack of
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UUM
Universiti Utara Malaysia

your supervisor?

5. How often do you find it difficult or impossible do to your job because of lack of the equipment or supplies?
6. How often do you find it difficult or impossible do to your job because of inadequate training?
7. How often do you find it difficult or impossible do to your job because of interruptions by other people?
8. How often do you find it difficult or impossible do to your job because the lack of necessary information about what to do or how to do it?
9. How often do you find it difficult or impossible do to your job because of the conflicting job demands?
10. How often do you find it difficult or impossible do to your job because of the inadequate help from others?
11. How often do you find it difficult or impossible do to your job because the incorrect instructions?

(Adapted from Spector & Jex, 1998)

➤ Interpersonal Conflict

Interpersonal conflict is commonly regarded disagreement between individual with another, sometimes it happened due to the poor treated from one's to others at work
(Spector and Jex, 1998).

1. How often do get an argument with others at work?
 2. How often do other people yell at you at work?
 3. How often are people rude to you at work?
 4. How often do other people do nasty things to you at
-

work?

(Adapted from Spector & Jex,
1998)

3.3.3 Technostress

The independent variable which is technostress with consisted of five dimensions which are techno-overload (5 items), techno-invasion (4 items), techno-complexity (5 items), techno-insecurity (5 items) and tecno-uncertainty (4 items) is measured using five-point Likert scale is presented in Table 3.3. All the instruments of the technostress adapted from Tarafdar et al. (2007).

Table 3.3
Items for the independent variable (Technostress)

Dimension	Operational Definition	Items
Independent Variable Technostress	Technostress can be identified as any negative effect that influenced the one's behavior, thought, attitude and psychology that results from the use of the computer-based ICTs (Tu, Wang, & Shu, 2005).	
➤ Techno-Overload	A situation where a leader who inclined to communicate more information than it should be and obtain more information that they can effectively process and use (Tarafdar et al., 2007).	<ol style="list-style-type: none">1. I am forced by this technology to work much faster.2. I am forced by this technology to do more work than I can handle.3. I am forced by this technology to work with very tight time schedules.4. I am forced to change my work habits to adapt to new technologies.5. I have a higher workload because of increased technology complexity.

(Adapted from Tarafdar et al, 2007)

➤ Techno-Invasion

Techno-invasion is defined as a situation where individuals feel that he or she cannot be escaped from the technology because they think that they are under surveillance and their lives has been conquered or overrun by the technology (Taraftdar et al., 2007).

1. I spent less time with my family due to this technology.
2. I have to be touch in my work even during vacation due to this technology.
3. I have to sacrifice my vacation and weekend time to keep current on new technologies.
4. I feel my personal life is being invaded by this technology.

(Adapted from Tarafdar et al, 2007)

➤ Techno-Complexity

Techno-complexity is about the employee's inadequate of the knowledge, skills and abilities (KSAs) in order to use the technology, that forced them to spend time, effort and willingness to understand the technology innovation from the various aspects (Taraftdar et al., 2007).

1. I do not know enough about this technology to handle my job satisfactorily.
2. I need a long time to understand and use new technologies.
3. I do not find enough time to study and upgrade my technology skills.
4. I find new recruits to this organization know more about computer technology than I do.
5. I often find it too complex for me to understand and use new technologies.

(Adapted from Tarafdar et al, 2007)

➤ Techno-Insecurity

Techno-insecurity reflect the feeling of threats face by employees regarding their current job that

1. I feel constant threat to my job security due to new technologies.
 2. I have to constantly
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probably will be passed to others who are expert and possess better knowledge, skills, and abilities about technology compared to them (Tarafdar et al., (2007).

- update my skills to avoid being replaced.
3. I am threatened by coworkers with newer technology skills.
 4. I do not share my knowledge with my coworkers for fear of being replaced.
 5. I feel there is less sharing of knowledge among coworkers for fear of being replaced.

(Adapted from Tarafdar et al, 2007)

➤ Techno-Uncertainty



Techno-uncertainty is a situation that arises when technology is upgraded or updated with new information or applications and functions in order to enhance the ICTs system (Tarafdar et al., 2007).

1. There are always new developments in technologies we use in our organization.
2. There are constant changes in computer software in our organization.
3. There are constant changes in computer hardware in our organization.
4. There are frequent upgrades in computer networks in my organization.

(Adapted from Tarafdar et al, 2007)

3.3.4 Internal Communication

The moderating variable which is internal communication consisted of six items is measured using five-point Likert Scale as shown in Table 3.4. All the instruments adapted from Bouckenooghe, Devos and Broeck (2009).

Table 3.4
Items for moderating variable (Internal Communication)

Dimension	Operational Definition	Items
Moderating Variable		
Internal Communication	A process of sending formal and informal information or sources that occurs within the organization in order to achieve the organizational requirement during the organizational change (Hayase, 2009).	<ol style="list-style-type: none"> 1. I am regularly informed on how the change is going. 2. There is good communication between supervisor and staff members about the organization's policy toward changes. 3. Information provided on change is clear. 4. I am sufficiently informed of the progress of change. 5. My organization are consulted about the reasons for change sufficiently. 6. Staff members were consulted about the reason for change.
Adapted from Bouckenooghe, Devos & Broeck, 2009)		

Below is the summary of the total instrument that have been used for this study.

Table 3.5
Summary of variable, dimension and total number of items

Variable/Dimension	Total number of items
Employee Commitment to Change (Adapted from Hercovitch & Meyer, 2002)	
➤ Affective commitment to change	06
➤ Continuance commitment to change	06
➤ Normative commitment to change	06
Work Stressors (Adapted from Osipow & Spokane, 1987; Spector & Jex, 1998)	
➤ Role overload	10
➤ Role conflict	10
➤ Role ambiguity	10
➤ Organizational constraints	11
➤ Interpersonal conflict	04
Technostress (Adapted from Tarafdar et al., 2007)	
➤ Techno-overload	5
➤ Techno-invasion	4
➤ Techno-Complexity	5
➤ Techno-Insecurity	5
➤ Techno-Uncertainty	4
Internal Communication (Adapted from Bouckenoghe, Devos & Broeck, 2009)	6

3.4 Population and Sample

According to Sekaran (2009) the population is referred as the entire group of people, organization or things that have the interest to the research. Besides, Gelaidan (2012) stated that, the procedure of sampling basically begins with the recognition of the

population. The study was conducted at public universities in the northern region of Malaysia. The target population for this study are the non-academic staff at three public universities in the northern region state of Malaysia. Even though, there had twenty (20) of public universities in Malaysia, which currently faced with the transformation and innovation due to Malaysia Education Blueprint (MEB) (HE). But, this study focus on the public universities that located in the northern region state of Malaysia such as UUM, UNIMAP, UITM and USM.

Besides, focused respondents of this study were non-academic staff from the public universities in the northern region of Malaysia. The sampling technique that used in this study was a convenience sampling technique. According to Sekaran (2003) convenience sampling is a nonprobability sampling technique which refers to the collection of information from the respondents who was selected due to their convenient to participate, availability or ease to access and proximity to the researcher. The convenience sampling technique is the most frequently used by the researchers because it is the best way to get feedback quickly and efficiency from the respondents.

3.5 Pre-test and Pilot Test of the Instrument

Before conducting the actual data collection, the researcher conducted the pre-test and pilot test in this study. The objective of conducting the pre-test and pilot test was to identified the constraint that faced by the respondents, while reading and answering the questionnaire by measuring the internal consistency of each instrument using the

Cronbach's Alpha reliability. Two respondents from Department of Registrar at UUM were participated in the pre-test of this study. The purpose of conducting the pre-test was to get the feedback from the respondents regarding the structure of the questions, languages and word that used in the questionnaire, the scale of measurement of each item, instruction that provided in the questionnaire, and also identify the approximate time needed in order to ease the respondents to answer the questionnaire.

After receiving feedback from both respondents at Department of Registrar UUM for the pre-test, the researcher received comments from the respondents. Firstly, was regarding the unclear instruction at the Section Two (A), (B), and (C) for the employee commitment to change. This is because at first the researcher only stated the basic instruction without mentioned clearly what types of the change that this study referred. Secondly, there was some vague meaning of the language and words that translated from English to Malay version.

After getting feedback from the pre-test, the researchers made changes on the questionnaire so that it can help the respondents to answering the questions. A pilot test for this study was conducted at the beginning of the October 2015 in order to measure items and also to test the reliability for each dimension in the questionnaire. The researcher, distributed 40 sets of questionnaires to two universities in the northern region of Malaysia which were Northern University of Malaysia (UUM) and University of Malaysia Perlis (UNiMAP). The targeted respondents for the pilot test were non-academic staff. From the 40 set of questionnaire, 20 sets were given to UUM and

another 20 set were given to the UNiMAP. However, the researcher obtained 30 feedbacks for the pilot test which were 18 from UNiMAP and 12 from UUM.

Pilot test is crucial for the study even though the items that used by the researcher were adapted from a well-established questionnaire, because different group of respondents will have different ideas and thought about the questionnaire. Any feedback and comments from the pilot-test by the respondent regarding questionnaire will be used for the further questionnaire refinement. According to Sekaran and Bougie (2010) the reliabilities below than 0.60 are considered to be poor, those ranges to 0.70 are acceptable and 0.80 and above are considered to be good. Thus, after conducting the pilot-test, it was found that the Cronbach's Alpha values ranged from 0.622 to 0.967 generally considered as sufficient for the research purposes (Nunally & Bernstein, 1978). Table 3.6 illustrates the reliability of Cronbach's Alpha value for each variable in this study.

Table 3.6
Reliability result of Pilot-Test of each variable

Variables/Dimension	Number of Items	Mean	Cronbach's Alpha Value
Affective Commitment	6	3.056	0.622
Continuance Commitment	6	3.311	0.676
Normative Commitment	6	3.111	0.641
Role Overload	10	3.607	0.893
Role Conflict	10	3.537	0.627
Role Ambiguity	10	3.713	0.702
Organizational Constraints	11	2.894	0.942
Interpersonal Conflict	4	1.958	0.899
Techno-Overload	5	3.107	0.967
Techno-Invasion	4	2.672	0.951

Variables/Dimension	Number of Items	Mean	Cronbach's Alpha Value
Techno-Compliance	5	2.333	0.933
Techno-Insecurity	5	2.607	0.831
Techno-Uncertainty	4	3.283	0.824
Internal Communication	6	3.722	0.920

3.6 Data Collection Method

The data of this study gained from the self-report questionnaire that has been distributed by drop-off and pick-up method. The questionnaire was drafted into two versions which were English version and Malay version as the survey was conducted among the all levels of administrative staff (non-academic) who were servicing in the public universities. After doing the translation to Malay version, the instruments had been checked and validated by the researcher's supervisor.

Before the questionnaire was distributed, the researcher listed the number of public universities which located in the northern region of Malaysia, which were Northern University of Malaysia (UUM), University of Malaysia Perlis, University of Science Malaysia (USM) and MARA University of Technology (UiTM) Perlis's branch. Even UiTM has three branches in the northern region of Malaysia, which are UiTM Penang, UiTM Kedah and UiTM Kangar, Perlis, but because of the time constraint the researcher decided to choose only UiTM Perlis as representative of the entire UiTM at the northern region of Malaysia.

The researcher called and e-mailed the permission letter for collecting data to these four universities in order to get permission to distribute the questionnaire. But only three public universities gave feedback to this study, they were Northern University of Malaysia (UUM), University of Malaysia Perlis (UNiMAP) and MARA University of Technology (UiTM) at Kangar, Perlis branch. During dealing with UUM, researcher called and went to meet with the registrar officer at the Department of Registrar in order to get the statistic of the non-academic staff of UUM. But, for UNiMAP and UiTM Perlis the researcher only gets the permission to go and distributed the questionnaire to non-academic staff by self and assigned one of the staff for each department to collect the questionnaire. The questionnaires with cover letter were placed in an envelope and the official letter for collecting data was attached outside the envelope.

During the process of distributed the questionnaire, the researcher “sent and drop” the questionnaire to the selected department of each university. The data collection of this study was conducted in the middle of October 2015 until the end of the October 2015. Researcher communicates through phone and e-mails with the officer-in charge in order to get know the progress of the questionnaire before collects it. Then researcher collected the questionnaires by hand from the officer-in-charge. In addition, the researcher distributed the questionnaire based on number of the participant who was conveniently available to participate in each department of three universities. Further, in two weeks time, a total of 248 respondents gave responses to this study, but, only 225 respondents had been completed the questionnaires. The total of 23 questionnaires were returned without answering and another 52 questionnaires were not returned back by the respondents.

3.7 Technique of Data Analysis

This study conducted data analysis by using Statistical Package for Social Science (SPSS) version 22.0, which involved data cleaning, explanatory factor analysis, reliability test, descriptive analysis, correlation analysis, and hierarchical regression analysis. Factor analysis was used to measure the validity of each factor structure of each variable in order to identify the most significant variables. The reliability analysis was tested on all items in order to test the consistency and stability of each item based on value of Cronbach' Alpha. Despite that, descriptive analysis, such as mean and standard deviation carried out to present the data collection in a simple way of measuring the frequencies of the nominal variable such as gender, age, status, employment level, job tenure, organizational tenure, status of job appointment and highest academic level and data of each nominal variable will be presented in percentage.

Next, the usage of the correlation analysis in this study is to examine the strength and direction of the relationship between two variables. In order to test hypotheses, the multiple regressions were used in this study, the used of hierarchical regression is to examine the moderating effect of internal communication of relationship between work stressors (role overload, role conflict, role ambiguity, organizational constraints and interpersonal conflict), technostress (techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty) on employee commitment to change.

3.8 Conclusion of the Chapter

In summary, this chapter critically discussed the research method that had been used in this study. The next chapter discuss the finding of the study.



CHAPTER FOUR

DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter provides findings of this study. The chapter consists of the responses of survey from respondents, data screening and respondents' demographic profile. Then, this chapter is followed by the explanatory factor analysis, reliability analysis results, correlation analysis, multiple regression analysis and hierarchical regression analysis.

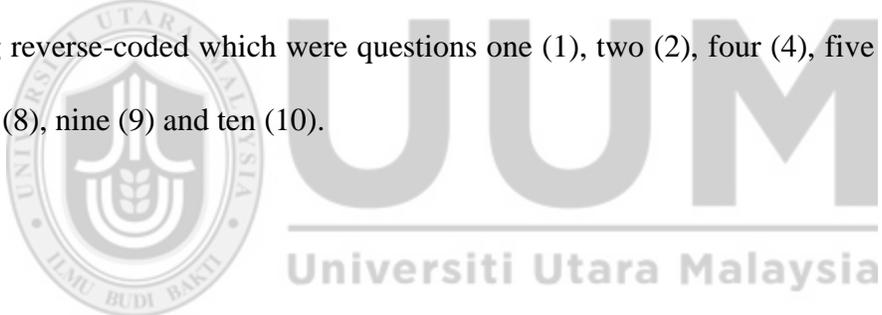
4.2 Data Screening



The first step that has been done after key-in data into Statistic Package for Social Science (SPSS) software was data screening. Data screening was carried out in order to ensure the accuracy of the data input before proceed with data analysis (Meyers, Gamst, & Guarino, 2012). To identify the missing data, the missing value analysis was conducted on this study in order to examine the correct data before continue hypothesis testing. This step was very crucial for the researcher to do because according to Cavana, Delahaye and Sekaran (2001) the missing values generally can negatively impact to the result of some empirical studies.

Fortunately, after testing the missing values there were no data found missing. Besides, this study conducted reverse-coded for five (5) negative statement of items employee commitment to change which were question three (3), five (5) and six (6) from Section Two (A) and question three (3) and six (6) from Section Two (C).

Finally, 3 dimensions were conducted reverse-coded for the instrument work stressors. There were only two for dimension role overload (2) items were being reverse-coded which were questions five (5) and six (6). Dimension role conflict was also two (2) items were being reverse-coded which were questions five (5) and eight (8). Finally, dimension for role ambiguity also was conducted reverse-coded, eight (8) items were being reverse-coded which were questions one (1), two (2), four (4), five (5), seven (7), eight (8), nine (9) and ten (10).



4.3 Survey Responses Rate

The researcher distributed 300 questionnaires to respondents in three universities which are situated in the northern region of Malaysia namely UUM, UNIMAP and UiTM Perlis. The items of the questionnaires were adapted from the previous studies such as Hercovitch and Meyer (2002), Osipow and Spokane (1987), Spector and Jex (1998), Tarafdar, et al. (2007) and Bouckenoghe, Devos & Broeck (2009). Besides, the researcher had made attempts in order to increase the number of the response rate such as by distributing the questionnaires to the respondents personally, appointing an officer-in-charge to remind and collecting the questionnaires from the respondents. The

respondents have been reminded by the researchers through telephone calls before researcher made the actual collection of the questionnaire in two weeks time.

However, out of the 300 of distributed questionnaires, there were only 225 of the respondents have returned with completed answer of questionnaires. Table 4.1 and Table 4.2 presents the total of distributed questionnaires and survey response rate of this study.

Table 4.1
Total number of distributed questionnaires

No	Name of Universities	Number of distributed questionnaires	Complete answering questionnaires
1	Northern University of Malaysia (UUM)	100	70
2	University of Malaysia Perlis (UNiMAP)	100	80
3	MARA University of Technology (UiTM)	100	75
	Total	300	225

Table 4.2
Rate of Survey Responses

	Total	Percentage (%)
Distributed questionnaires	300	100.0
Returned with complete answering	225	75.0
Returned without answering	23	7.7
Uncollected questionnaires	52	17.3

4.4 Demographic Results

This part of the study shows the respondent's demographic profile involved in the current study. Demographic profile consists of gender, age, status, job tenure, organizational tenure, status of job appointment and highest academic level. Table 4.3 presents comprehensive details of respondent's demographic.

4.4.1 Gender

The gender distribution in this study shows that female had the highest number which was 140 or 62.2% of the overall respondents, and the number of males was 85 or 37.8% respondents.

4.4.2 Age

This study segregated the age of respondents into five levels. The majority of respondents who participated in this study were at age 30 to 39 years, which was 97 or 43.1% of the overall respondents. The level of age between 20 to 29 years was 63 or 28% of respondents. Then followed by age 40 to 49 years, was 49 or 21.8% of respondents. The level above 50 years was 13 or 5.8% of respondents and the lower number of respondents at the age below 20 years was only 3 or 1.3% of respondents.

4.4.3 Marital Status

Based on the finding result, most of the respondents who participated in this study were married respondents with the total 170 or 75.6%. Then, it is followed up with the total

51 or 22.7% of the single respondents and the balance of 4 or 1.8% were divorced respondents.

4.4.4 Employment Level

Employment level has been divided into two categories which were management and support staff. The result shows that the majority respondents who participated in this study were support staff with the total number 171 or 76% of the overall respondents and balance of 54 or 24% belongs to management respondents.

4.4.5 Job Tenure

This study segregated the level of respondent's job tenure into 6 categories. The highest frequency of the job tenure belongs to 6 to 10 years with total number of respondents 68 or 30.2%. Next, it is followed by 1 to 5 years with the respondent's total frequency were 61 or 27.1%. The third highest frequency were belongs to 11 to 15 years with 52 or 23.1% of total respondents. For 20 years or more with total number of respondents were 25 or 11.1%. The second lowest frequency of job tenure were respondents who work less than 1 year with total number 11 or 4.9% of respondents and the lowest frequency of job tenure in this study were 16 to 19 years with total 8 or 3.6% of respondents.

4.4.6 Organizational Tenure

For the organizational tenure, the majority of respondents with a total number of 88 or 39.1% belongs to 1 to 5 years. Next, 58 or 25.8% of the respondents have 6-10 years experience for the organization tenure. Then, for 11-15 years were 33 or 14.7% of respondents. A total number 24 or 10.7% of respondents was less than 1 years

organizational tenure. The second lowest frequency of organizational tenure belongs to 20 years or more with the total number of respondents 18 or 8% and the lowest frequency for organizational tenure belongs to 16 to 19 years with 6 or 1.8% of respondents.

4.4.7 Status of Job Appointment

The majority number of respondents were permanent employees with the frequency 163 or 72.4% and remaining of 62 or 27.6% belongs to contract employees.

4.4.8 Highest Academic Level

This study segregated respondent's academic level into six categories. The highest academic level of respondent belongs to the diploma holder with a total number 71 or 31.6%. Then, followed by bachelor degree holder with 52 or 23.1% of respondents. Then, 43 or 18.2% were certificate holder respondents. Last but not least, 13 or 5.8% were from master degree and 5 or 2.2% from doctoral degree.

Table 4.3
The Frequencies of Respondent's Demographic Profile

Demographic Profile	Number of Respondents	Percentage
Gender		
Male	85	37.8
Female	140	62.2
Total	225	100
Age		
Below 20 years	3	1.3
20-29 years	63	28.0
30-39 years	97	43.1
40-49 years	49	21.8
≥50 years	13	5.8
Total	225	100

Demographic Profile	Number of Respondents	Percentage
Status		
Single	51	22.7
Married	170	75.6
Divorced	4	1.8
Total	225	100
Employment Level		
Management	54	24
Support Staff	171	76
Total	225	100
Job Tenure		
<1 year	11	4.9
1-5 years	61	27.1
6-10 years	68	30.2
11-15 years	52	23.1
16-19 years	8	3.6
20 years or more	25	11.1
Total	225	100
Organizational Tenure		
< 1 year	24	10.7
1-5 years	88	39.1
6-10 years	58	25.8
11-15 years	33	14.7
16-19 years	4	1.8
20 years or more	18	8.0
Total	225	100
Status of Job Appointment		
Permanent	163	72.4
Contract	62	27.6
Total	225	100
Highest Academic Level		
Doctoral Degree	5	2.2
Master Degree	13	5.8
Bachelor Degree	52	23.1
Diploma	71	31.6
Certificate	43	19.1
Others	41	18.2
Total	225	100

4.5 Exploratory Factor Analysis

In order to confirm the validity and factor structure for each variable, this study used the exploratory factor analysis (EFA). According to Hair et al., (2010) factor analysis is a set of statistical method that is used to define the underlying structure data matrix. The purpose of conducting factor analysis is to reduce the number of extensive sets of variables into more meaningful, interpretable, and manageable set of factors. Besides, Hair, Black, Babin and Anderson (2010) stated that, the higher of the factor loading the more significant the items of variables. There were four component variables that were being performed by using principle component analysis and Varimax rotation in order to get the valid measure of factor loading.

The first component was dependent variable which consists of three dimensions which were affective commitment consists of six (6) items, normative commitment consists of six (6) items and continuance commitment consists of six (6) items. Second component was independent variable which consists of two variables which were work stressors and technostress. In addition, each of the independent variables consists of five (5) dimensions. The dimension for work stressors consist of role overload with ten (10) items, role conflict with ten (10) items, role ambiguity with ten (10) items, organizational constraints with eleven (11) items and interpersonal conflict with four (4) items. Technostress dimensions consist of techno-overload with five (5) items, techno-invasion with four (4) items, techno-complexity with (5) items, techno-insecurity with five (5) items and techno-uncertainty with four (4) items. Finally, moderating variable which was internal communication of consists six (6) items. According to Igarria and

Iivari (1995) items with loading below or equal 0.50 and item with cross loading with smaller than 0.35 on two or more factors need to be deleted or dropped from the further analysis.

Based on exploratory factor analysis results, there were several numbers of items have been dropped due to low loading and cross loading for the variable employee commitment to change. Three (3) items were dropped from affective commitments which were question number three (3), five (5), and six (6), and then the rest questions were retained. Next, for the continuance commitment only three (3) questions were retained. The questions that have been dropped due to cross loading and low loading were question number four (4), five (5), and six (6). Lastly, for the normative commitment to change were questions number three (3) and six (6) had been dropped because of low loading and the items loading onto more than one factor and the rest questions were retained.

Independent variables consists of two (2) variable which were work stressors and tehnostress and each of the variables consisted of five (5) dimensions. Firstly, three (3) dimensions of work stressors which were role conflict, role ambiguity and interpersonal conflict have been dropped from this study due to lower loading and cross loading. Further, one of five dimensions of technostress which was techno-complexity was dropped and one (1) item from techno-overload was being deleted due to cross loading and low loading factor. However, there were no items dropped from internal communication variables.

Thus, factor loading of the independent variables (work stresses and technostress) was presented in Table 4.4 and Table 4.5, while, moderating variable (internal communication) was presented in Table 4.6 and lastly, Table 4.7 presented factor loading of the dependent variables (affective, normative and continuance).

Table 4.4

Factor Loading of Independent Variables (Work Stressors) based on Exploratory Factor Analysis

Variables/Demensions	Items	Factor Loading
Work Stressors		
➤ Role Overload	• At work, I am expected to do too many different tasks in too little time.	0.752
	• I feel that my job responsibilities are increasing.	0.775
	• I often have too much to do in my job.	0.837
	• I work under tight deadline.	0.669
	• My job requires me to work in several equally important areas at once.	0.646
	• I am expected to do more work than is reasonable.	0.718
	➤ Organizational Constraints	• How often do you find it difficult or impossible to do your job because of the poor equipment or supplies?
• How often do you find it difficult or impossible to do your job because of the organizational rules and procedures?		0.786
• How often do you find it difficult or		0.755

Variables/Demensions	Items	Factor Loading
	impossible to do your job because of other employees?	
	• How often do you find it difficult or impossible to do your job because of your supervisor?	0.812
	• How often do you find it difficult or impossible to do your job because of lack of the equipment or supplies?	0.728
	• How often do you find it difficult or impossible to do your job because of inadequate training?	0.794
	• How often do you find it difficult or impossible to do your job because of interruptions by other people?	0.781
	• How often do you find it difficult or impossible to do your job because of the lack of necessary information about what to do or how to do it?	0.760
	• How often do you find it difficult or impossible to do your job because of the conflicting job demands?	0.781
	• How often do you find it difficult or impossible to do your job because of the inadequate help from others?	0.820
	• How often do you find it difficult or impossible to do your job because of the incorrect instructions?	0.783



Variables/Demensions	Items	Factor Loading
Percentage of Variance Explained		59.602
KMO Measure of Sampling Adequacy		0.905
Approximate Chi-Square		2238.584

Based on the result, the KMO measure of sampling adequacy was 0.905 for the independent variable of work stressors. While, the approximate Chi-Square was 2238.584 and percentage of variance explained for the four dimensions of the independent variable of work stressors was 59.602 percent.

Table 4.5
Factor Loading of Independent Variables (Technostress) based on Exploratory Factor Analysis

Variable/Dimension	Items	Factor Loading
Technostress		
➤ Techno-Overload	<ul style="list-style-type: none"> • I am forced by this technology to work much faster. • I am forced by this technology to do more work than I can handle • I am forced by this technology to work with very tight time schedules. • I am forced to change my work habits to adapt to new technologies. 	<p>0.864</p> <p>0.868</p> <p>0.859</p> <p>0.701</p>

Variable/Dimension	Items	Factor Loading
➤ Techno-Invasion	• I spent less time with my family due to this technology.	0.845
	• I have to be touch in my work even during vacation due to this technology.	0.899
	• I have to sacrifice my vacation and weekend time to keep current on new technologies.	0.829
	• I feel my personal life is being invaded by this technology.	0.855
➤ Techno-Insecurity	• I feel constant threat to my job security due to new technologies.	0.572
	• I have to constantly update my skills to avoid being replaced.	0.713
	• I am threatened by coworkers with newer technology skills.	0.786
	• I do not share my knowledge with my coworkers for fear of being replaced.	0.726
	• I feel there is less sharing of knowledge among coworkers for fear of being replaced.	0.794
	• There are always new development in technologies we use in our organization	0.840
➤ Techno-Uncertainty	• There are constant changes is computer software in our organization.	0.820
	• There are constant changes in computer hardware in our organization.	0.848

Variable/Dimension	Items	Factor Loading
	<ul style="list-style-type: none"> • There are frequent upgrades in computer networks in my organization. 	0.860
Percentage of Variance Explained		73.234
KMO Measure of Sampling Adequacy		0.868
Approximate Chi-Square		2485.097

Based on the result, the KMO measure of sampling adequacy was 0.868 for the dependent variable of technostress. While, the approximate Chi-Square was 2485.097 and percentage of variance explained for the four dimensions of the independent variable of technostress was 73.234 percent.

Table 4.6
Factor Loading of Moderating Variable based on Exploratory Factor Analysis

Variables/Dimensions	Items	Factor Loading
Internal Communication	<ul style="list-style-type: none"> • I am regularly informed on how the change is going. 	0.800
	<ul style="list-style-type: none"> • There is good communication between supervisor and staff members about the organization 's policy toward changes. 	0.847
	<ul style="list-style-type: none"> • Information provided on change is clear. 	0.871
	<ul style="list-style-type: none"> • I am sufficiently informed of the progress of change. 	0.870

<ul style="list-style-type: none"> • My organization are consulted about the reasons for change sufficiently. 	0.866
<ul style="list-style-type: none"> • Staff members were consulted about the reason for change. 	0.804
Percentage of Variance Explained	71.153
KMO Measure of Sampling Adequacy	0.886
Approximate Chi-Square	921.192

Based on the result, the KMO measure of sampling adequacy was 0.886 for the moderating variable. While, the approximate Chi-Square was 921.192 and percentage of variance explained was 71.153 percent.

Table 4.7
Factor Loading of Dependent Variable based on Exploratory Factor Analysis

Variables/Demensions	Items	Factor Loading
Employee Commitment to Change		
➤ Affective Commitment	• I believe in the value of this change.	0.896
	• I believe this change is a good strategy for the organization.	0.908
	• Things would be better without this change.	0.900
➤ Normative Commitment	• I feel a sense of duty to work	0.901

	toward this change.	
	• I do not think it would be right for me to oppose this change.	0.903
	• It would be irresponsible for me to resist this change.	0.869
	• I would feel guilty about opposing is change	0.892
➤ Continuance Commitment	• I have no choice but to go along with this change.	0.964
	• I feel pressure to go along with this change.	0.963
	• I have to much at stake to resist this change.	0.547
Percentage of Variance Explained		81.999
KMO Measure of Measure of Sampling Adequacy		0.749
Approximate Chi-Square		2499.399

Based on the result, the KMO measure of sampling adequacy was 0.749 for the dependent variable. While, the approximate Chi-Square was 2499.399 and percentage of variance explained for three dimensions of the dependent variable was 81.999 percent.

4.6 Restatement of Hypotheses

Restatement of the hypotheses of this study has been made after analyzing and reviewing the result of the Explanatory Factor Analysis (EFA). Hence, following are the proposed of new hypotheses for further analysis of the study:

H_{1a}: There is a significant and negative relationship between role overload and affective commitment to change

H_{1b}: There is a significant and negative relationship between organizational constraint and affective commitment to change.

H_{1c}: There is a significant and negative relationship between role overload and continuance commitment to change.

H_{1d}: There is a significant and negative relationship between organizational constraint and continuance commitment to change.

H_{1e}: There is a significant and negative relationship between role overload and normative commitment to change.

H_{1f}: There is a significant and negative relationship between organizational constraint and normative commitment to change.

H_{2a}: There is a significant and negative relationship between techno-overload and affective commitment to change.

- H_{2b}: There is a significant and negative relationship between techno-invasion and affective commitment to change.
- H_{2c}: There is a significant and negative relationship between techno-insecurity and affective commitment to change.
- H_{2d}: There is a significant and negative relationship between techno-uncertainty and affective commitment to change.
- H_{2e}: There is a significant and negative relationship between techno-overload and continuance commitment to change.
- H_{2f}: There is a significant and negative relationship between techno-invasion and continuance commitment to change.
- H_{2g}: There is a significant and negative relationship between techno-insecurity and continuance commitment to change.
- H_{2h}: There is a significant and negative relationship between techno-uncertainty and continuance commitment to change.
- H_{2i}: There is a significant and negative relationship between techno-overload and normative commitment to change.
- H_{2j}: There is a significant and negative relationship between techno-invasion and normative commitment to change.
- H_{2k}: There is a significant and negative relationship between techno-insecurity and normative commitment to change.

- H₂₁: There is a significant and negative relationship between techno-uncertainty and normative commitment to change
- H_{3a}: Internal communication moderate relationship between role overload and affective commitment to change.
- H_{3b}: Internal communication moderate relationship between organizational constraints and affective commitment to change.
- H_{3c}: Internal communication moderate relationship between role overload and continuance commitment to change.
- H_{3d}: Internal communication moderate relationship between organizational constraints and continuance commitment to change.
- H_{3e}: Internal communication moderate relationship between role overload and normative commitment to change.
- H_{3f}: Internal communication moderate relationship between organizational constraints and normative commitment to change.
- H_{4a}: Internal communication moderate relationship between techno-overload and affective commitment to change.
- H_{4b}: Internal communication moderate relationship between techno-invasion and affective commitment to change.

- H_{4c}: Internal communication moderate relationship between techno-insecurity and affective commitment to change.
- H_{4d}: Internal communication moderate relationship between techno-uncertainty and affective commitment to change.
- H_{4e}: Internal communication moderate relationship between techno-overload and continuance commitment to change.
- H_{4f}: Internal communication moderate relationship between techno-invasion and continuance commitment to change.
- H_{4g}: Internal communication moderate relationship between techno-insecurity and continuance commitment to change.
- H_{4h}: Internal communication moderate relationship between techno-uncertainty and continuance commitment to change.
- H_{4i}: Internal communication moderate relationship between techno-overload and normative commitment to change.
- H_{4j}: Internal communication moderate relationship between techno-invasion and normative commitment to change.
- H_{4k}: Internal communication moderate relationship between techno-insecurity and normative commitment to change.
- H_{4l}: Internal communication moderate relationship between techno-uncertainty and normative commitment to change.

Aligned with the restatement of hypotheses, this study has formulated the following objectives:

- i. To determine the influence of employee work stressors (role overload and organizational constraints) on employee commitment to change (affective, continuance, and normative).
- ii. To determine the influence of employee technostress (techno-overload, techno-invasion, techno-insecurity and techno-uncertainty) on employee commitment to change (affective, continuance, and normative).
- iii. To determine the moderating effect of the internal communication on the relationship between work stressors (role overload and organizational constraints and) and employee commitment to change (affective, continuance, and normative).
- iv. To determine the moderating effect of the internal communication on the relationship between technostress (techno-overload, techno-invasion, techno-insecurity and techno-uncertainty) and commitment to change (affective, continuance, and normative).

4.7 Reliability Analysis

After conducting the Explanatory Factor Analysis (EFA) this study performed the reliability analysis based on the remaining items on the independent variables, moderating variable and dependent variable. In order to measure of the variables the internal consistency and stability of the instruments was used in this study. Besides, the acceptability or validity of the variables will be determined based on the result of the Cronbach's Alpha value range. Based on the results, the Cronbach's Alpha for dependent variables which was employee commitment to change for the affective commitment was 0.928 with three (3) items, continuance commitment was 0.786 with three (3) items and normative commitment was 0.935 with four (4) items. Next, the Cronbach's Alpha for the independent variables of four (4) dimensions for work stressors were; role overload was 0.832 with six (6) items and organizational constraints was 0.936 with eleven (11) items.

Whereas, the Cronbach's Alpha for technostress by dimensions were; techno-overload was 0.901 with four (4) items, techno-invasion was 0.924 with four (4) items, techno-insecurity was 0.808 with five (5) items, and techno-uncertainty was 0.891 with four (4) items. Lastly, the result of the Cronbach's Alpha for moderating variable which was internal communication was 0.919 with six (6) items. Table 4.8 illustrated the result of Cronbach's Alpha for all variables.

Table 4.8
Result of Reliability Analysis

Variables	Dimensions	Total Number of Items	Cronbach' Alpha
Dependent Variable			
Employee Commitment to Change			
	➤ Affective Commitment	3	0.928
	➤ Continuance Commitment	3	0.786
	➤ Normative Commitment	4	0.935
Independent Variables			
Work Stressors			
Technostress	➤ Role Overload	6	0.832
	➤ Organizational Constraints	11	0.936
	➤ Techno-Overload	4	0.901
	➤ Techno-Invasion	4	0.924
	➤ Techno-Insecurity	5	0.808
	➤ Techno-Uncertainty	4	0.891
	Moderating Variable		
Internal Communication		6	0.919

4.8 Descriptive Statistics

Table 4.9 presented the value of mean and standard deviation of descriptive statistic for dependent variable, independent variables and moderating variable.

Table 4.9
Descriptive statistic

Variables	Mean	Standard Deviation
Dependent Variable		
➤ Affective Commitment	3.87	0.642
➤ Continuance Commitment	3.26	0.771
➤ Normative Commitment	3.83	0.619
Independent Variable		
➤ Role Overload	3.47	0.643
➤ Organizational Constraints	2.94	0.721
➤ Techno-Overload	3.13	0.910
➤ Techno-Invasion	2.66	0.966
➤ Techno-Insecurity	2.89	0.835
➤ Techno-Uncertainty	3.35	0.779
Moderating Variable		
➤ Internal Communication	3.63	0.686

4.9 Correlation Analysis

The purpose of conducting the correlation analysis is to determine the relationship among variables; employee commitment to change (affective, continuance and normative), work stressors (role overload and organizational constraints), technostress (techno-overload, techno-invasion, techno-insecurity and techno-uncertainty) and internal communication. Table 4.10 illustrated the correlation value of all the variables in order to measure the direction, strength and significance of the bivariate relationship.

Based on the result of the correlation test role overload ($r = -0.143$, $p < 0.05$), organizational constraints ($r = -0.198$, $p < 0.01$), techno-invasion ($r = -0.159$, $p < 0.01$) and techno-insecurity ($r = -0.121$, $p < 0.01$) were negatively correlated to the affective commitment to change. Whereas, techno-uncertainty ($r = 0.270$, $p < 0.01$) was positively correlated to affective commitment to change. However, techno-overload ($r = 0.086$, $p > 0.05$) was not correlated to affective commitment to change.

Next, role overload ($r = 0.120$, $p < 0.05$), organizational constraints ($r = 0.189$, $p < 0.01$), techno-overload ($r = 0.388$, $p < 0.01$), techno-invasion ($r = 0.170$, $p < 0.01$), techno-insecurity ($r = 0.168$, $p < 0.01$) and techno-uncertainty ($r = 0.191$, $p < 0.01$) were positively correlated with continuance commitment to change. Further, based on the result for normative commitment to change, there were positive correlated between role overload ($r = 0.216$, $p < 0.01$) and techno-uncertainty ($r = 0.262$, $p < 0.01$) on the normative commitment to change. Whereas, there were negative correlated between organizational constraints ($r = -0.215$, $p < 0.01$), techno-invasion ($r = -0.230$, $p < 0.01$) and techno-

insecurity ($r = -0.185$, $p < 0.01$) on normative commitment to change. However, techno-overload ($r = 0.038$, $p > 0.05$) was not correlated to normative commitment to change.

The moderating variable (MV), which was internal communication, were found positively correlated with affective commitment ($r = 0.368$, $p < 0.01$), normative commitment to change ($r = 0.472$, $p < 0.01$), techno-overload ($r = 0.195$, $p < 0.01$) and techno-uncertainty ($r = 0.566$, $p < 0.01$). Next, there was negative correlated between moderating variable (internal communication) with organizational constraints ($r = -0.164$, $p < 0.01$). However, there were no correlated relationship between internal communication and continuance commitment ($r = -0.10$, $p > 0.05$) and techno-invasion ($r = -0.110$, $p > 0.05$).



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Table 4.10
Results of Correlation Analysis

	Affective	Continuance	Normative	Role Overload	Organizational Constraints	Techno-Overload	Techno-Invasion	Techno-Insecurity	Techno-Uncertainty	Internal Communication
Affective	1									
Continuance	-.071	1								
Normative	.479**	.010	1							
Role Overload	-.143*	.120*	.216**	1						
Organizational Constraints	-.198**	.189**	-.215**	.218**	1					
Techno-Overload	.086	.388**	.038	.320**	.382**	1				
Techno-Invasion	-.159**	.170**	-.230**	.315**	.654**	.415**	1			
Techno-Insecurity	-.121**	.168**	-.185**	.144*	.531**	.295**	.474**	1		
Techno-Uncertainty	.270**	.191**	.263**	.256**	.049	.442**	.129*	.211**	1	
Internal Communication	.368**	-.010	.472**	.178**	-.164**	.195**	-.110	.021	.566**	1

**Correlation is significant at the 0.01 level (1-tailed)

*Correlation is significant at the 0.05 level (1-tailed)

4.10 Hierarchical Regression Analysis

There are several methods to examine the regression analysis for instance, standard regression, hierarchical regression and stepwise regression. Hence, this study uses standard regression to examine the direct relationship between independent variables and dependent variable and the hierarchical regression analysis is used to examine the moderating variable of internal communication on the relationship between independent variables and the dependent variable.

There were three steps that involved in order to test regression analysis. The first step was testing direct relationship between independent variables (work stressors and technostress) and dependent variable (employee commitment to change). Then, followed by the second step which was testing the moderating variable (internal communication). Finally, the third step was testing the interaction effect of internal communication (moderating variable) on the relationship of work stressors and technostress (independent variables) with employee commitment to change (dependent variable). Table 4.11 shows the result of hierarchical regression of work stressors, technostress and internal communication on affective commitment to change.

Table 4.11

Result of Hierarchical Regression Analysis based on Affective Commitment to Change

Predictor	Model 1		Model 2		Model 3	
	Unstd	Std	Unstd	Std	Unstd	Std
Step 1: Independent Variables						
Constant	3.321		2.815		3.080	
Role Overload	0.144	0.144**	0.119	0.119*	0.065	0.065
Organizational Constraints	-0.121	-0.135	-0.089	-0.100	-0.168	-0.190**
Techno-Overload	0.045	0.063	0.040	0.057	0.033	0.047
Techno-Invasion	-0.092	-0.138	-0.068	-0.103	-0.041	-0.062
Techno-Insecurity	-0.057	-0.075	-0.063	-0.081	-0.052	-0.068
Techno-Uncertainty	0.202	0.245***	0.090	0.109	0.107	0.130
Step 2: Internal Communication			0.232	0.248***	0.223	0.238***
Step 3: Interaction						
Role Overload x Internal Communication					-0.184	-0.144*
Organizational Constraints x Internal Communication					0.162	0.155
Techno-Overload x Internal Communication					-0.090	-0.106
Techno-Invasion x Internal Communication					0.078	0.096
Techno-Insecurity x Internal Communication					-0.029	-0.029
Techno-Uncertainty x Internal Communication					0.327	0.302***
<hr/>						
R ²	0.150		0.188		0.243	
ΔR ²	0.150		0.039		0.055	
ΔF	6.406***		10.301***		2.536**	

Note: * <0.10, ** p<0.05, *** p<0.01

Based on Table 4.11 presents the moderating effect of internal communication on relationship of work stressors (role overload and organizational constraints) and technostress (techno-overload, techno-invasion, techno-insecurity and techno-uncertainty) with respect to affective commitment to change. The R square value for Model 1 was 15% variance of the employee's affective commitment to change was explained by the role overload, organizational constraints, techno-overload, techno-invasion, techno-insecurity and techno-uncertainty, and the remaining of the total percentage might be from the external factor that was not being examined in this study. Besides, this model also possessed the largest change in R square. Thus, techno-uncertainty ($\beta = 0.245$, $p < 0.01$) and role overload ($\beta = 0.144$, $p < 0.05$) was significantly and positively contributed to the affective commitment to change. Others were not significantly contributed to affective commitment to change.

Next, the interaction (between internal communication and two independent variable which are work stressors and technostress) entered at Model 3 presented R square change of 5.5%. In addition based on the three set of variables entered which namely predictor, moderator and interaction, they produced significant F-test, $F = 6.406$, $p < 0.01$, $F = 10.301$, $p < 0.01$, $F = 2.536$, $p < 0.05$.

Besides, in Model 3 also has a direct significant and negative relationship between organizational constraints and affective commitment to change ($\beta = -0.190$, $p < 0.05$). Meanwhile, based on the result of interaction variables shows that there was significant and negative moderating effect of internal communication between role overload and employee's affective commitment to change with the value ($\beta = -$

0.144, $p < 0.05$). Besides, there was a significant positive interaction effect of internal communication on the relationship between techno-uncertainty and employee's affective commitment to change with the value ($\beta = 0.302$, $p < 0.01$). But, there have no significant effect of internal communication on the relationship between organizational constraints ($\beta = 0.155$, $p > 0.05$), techno-overload ($\beta = -0.106$, $p > 0.05$), techno-invasion ($\beta = 0.096$, $p > 0.05$) and techno-insecurity ($\beta = -0.029$, $p > 0.05$) with affective commitment to change.



Table 4.12

Result of Hierarchical Regression Analysis based on Continuance Commitment to Change

Predictor	Model 1		Model 2		Model 3	
	Unstd	Std	Unstd	Std	Unstd	Std
Step 1: Independent Variables						
Constant	2.041		2.395		2.369	
Role Overload	-0.010	-0.008	0.008	0.006	0.060	0.050
Organizational Constraints	0.053	0.050	0.031	0.029	0.040	0.038
Techno-Overload	0.305	0.361***	0.309	0.364***	0.314	0.371***
Techno-Invasion	-0.029	-0.036	-0.045	-0.056	-0.070	-0.087
Techno-Insecurity	0.044	0.048	0.048	0.052	0.030	0.033
Techno-Uncertainty	0.026	0.026	0.104	0.105	0.092	0.093
Step 2: Internal Communication			-0.062	-0.144*	-0.172	-0.153*
Step 3: Interaction						
Role Overload x Internal Communication					0.128	0.278
Organizational Constraints x Internal Communication					0.131	0.105
Techno-Overload x Internal Communication					0.055	0.054
Techno-Invasion x Internal Communication					-0.168	-0.173
Techno-Insecurity x Internal Communication					0.064	0.053
Techno-Uncertainty x Internal Communication					-0.096	-0.074
<hr/>						
R ²	0.155		0.168		0.182	
ΔR ²	0.155		0.013		0.014	
ΔF	6.774***		3.408*		0.607	

Note: *p<0.10, **p<0.05, ***p<0.01

Based on Table 4.12 presents the moderating effect of internal communication on relationship of work stressors (role overload and organizational constraints) and technostress (techno-overload, techno-invasion, techno-insecurity and techno-uncertainty) with respect to continuance commitment to change. The R square value for Model 1 was 15.5% variance of the employee's continuance commitment to change was explained by the role overload, organizational constraints, techno-overload, techno-invasion, techno-insecurity and techno-uncertainty, and the remaining of the total percentage might be from the external factor that was not being examined in this study. Besides, this model also possessed the largest change in R square. Thus, techno-overload ($\beta = 0.361$, $p < 0.01$) was significantly and positively contributed to the continuance commitment to change. Others were not significantly contributed to continuance commitment to change.

Next, the interaction (between internal communication and two independent variable which are work stressors and technostress) that was entered at Model 3 presented R square change of 1.4%. In addition based on the three set of variables that was entered which were predictor, moderator and interaction was produced significant F-test, $F = 6.774$, $p < 0.01$, $F = 3.408$, $p < 0.05$, $F = 0.607$, $p > 0.05$. Besides, in Model 3 also has a direct significant and positive relationship between techno-overload and continuance commitment to change ($\beta = 0.371$, $p < 0.01$). However, there was no interaction effect of internal communication on the relationship of role overload, organizational constraints, techno-overload, techno-invasion, techno-insecurity and techno-uncertainty with the employee's continuance to change.

Table 4.13

Result of Hierarchical Regression Analysis based on Normative Commitment to Change

Predictor	Model 1		Model 2		Model 3	
	Unstd	Std	Unstd	Std	Unstd	Std
Step 1: Independent Variables						
Constant	3.118		2.345		2.515	
Role Overload	0.247	0.257***	0.209	0.217***	0.162	0.169**
Organizational Constraints	-0.045	-0.053	0.003	0.004	-0.073	-0.085
Techno-Overload	0.003	0.055	-0.004	-0.006	-0.016	-0.023
Techno-Invasion	-0.159	-0.249***	-0.124	-0.193**	-0.099	-0.155*
Techno-Insecurity	-0.097	-0.131*	-0.105	-0.142**	-0.091	-0.123*
Techno-Uncertainty	0.204	0.055***	0.034	0.042	0.064	0.081
Step 2: Internal Communication						
			0.354	0.393***	0.359	0.398***
Step 3: Interaction						
Role Overload x Internal Communication					-0.255	-0.208***
Organizational Constraint x Internal Communication					0.091	0.09
Techno-Overload x Internal Communication					-0.003	-0.004
Techno-Invasion x Internal Communication					0.010	0.012
Techno-Insecurity x Internal Communication					0.036	0.037
Techno-Uncertainty x Internal Communication					0.191	0.183**
<hr/>						
R ²		0.216		0.313		0.356
ΔR ²		0.216		0.097		0.044
ΔF		10.011***		30.526***		2.379**

Note: *p<0.10, **p<0.05, ***p<0.01

Based on Table 4.13 presented the moderating effect of internal communication on relationship of work stressors (role overload and organizational constraints) and technostress (techno-overload, techno-invasion, techno-insecurity and techno-uncertainty) with respect to normative commitment to change. The R square value for Model 1 was 21.6% variance of the employee's normative commitment to change was explained by the role overload, organizational constraints, techno-overload, techno-invasion, techno-insecurity and techno-uncertainty, and the remaining of the total percentage might be from the external factor that was not being examined in this study. Besides, this model also possessed the largest change in R square. Thus, role overload ($\beta = 0.257$, $p < 0.01$) and techno-uncertainty ($\beta = 0.055$, $p < 0.01$) was significantly and positively contributed to the normative commitment to change. Whereas, techno-invasion ($\beta = -0.249$, $p < 0.01$) and techno-insecurity ($\beta = -0.131$, $p < 0.10$) was significant and negatively contributed to the normative commitment to change. Others were not significantly contributed to normative commitment to change.

Next, the interaction (between internal communication and two independent variable which are work stressors and technostress) entered at Model 3 presented R square change of 4.4%. In addition based on the three set of variables that was entered which were predictor, moderator and interaction was produced significant F-test, $F = 10.011$, $p < 0.01$, $F = 30.526$, $p < 0.01$, $F = 2.379$, $p < 0.05$. Besides, in Model 3 also has a direct significant and positive relationship between role overload and normative commitment to change ($\beta = 0.169$, $p < 0.05$). While, techno-invasion ($\beta = -0.155$, $p < 0.10$) and techno-insecurity ($\beta = -0.123$, $p < 0.10$) was significant and negatively correlated to employee's normative commitment to change.

Next, based on the interaction variables of Model 3 there has a significant and negative interaction effect of the internal communication on the relationship between role overload and normative commitment to change with the value ($\beta = -0.208, p < 0.01$). Whereas, the others interaction variables shows that there is no significant between direct independent variables and dependent variable, but the existence of the internal communication as a moderating effect can enhance the employee to give commitment to change.

4.11 The Summary of Hierarchical Regression Analyses

After conducting regression analysis, this study has come out with the result of the hypotheses. Four hypotheses were accepted and the others were rejected. Thus, Table 4.14 illustrated summary of accepted and rejected hypotheses after conducting the regression analysis.

Table 4.14
Summary of the Hypotheses Testing

N	Hypotheses Statement	Remarks
1	H _{1a} There is a significant and negative relationship between role overload and employee's affective commitment to change.	Not supported
2	H _{1b} There is a significant and negative relationship between organizational constraints and employee's affective commitment to change.	Not Supported
3	H _{1c} There is a significant and negative relationship between role overload and employee's continuance commitment to	Not Supported

N	Hypotheses Statement	Remarks
	change.	
4	H _{1d} There is a significant and negative relationship between organizational constraints and employee's continuance commitment to change.	Not Supported
5	H _{1e} There is a significant and negative relationship between role overload and employee's normative commitment to change.	Not Supported
6	H _{1f} There is a significant and negative relationship between organizational constraints and employee's normative commitment to change.	Not Supported
7	H _{2a} There is a significant and negative relationship between techno-overload and employee's affective commitment to change.	Not Supported
8	H _{2b} There is a significant and negative relationship between techno-invasion and employee's affective commitment to change.	Not Supported
9	H _{2c} There is a significant and negative relationship between techno-insecurity and employee's affective commitment to change.	Not Supported
10	H _{2d} There is a significant and negative relationship between techno-uncertainty and employee's affective commitment to change.	Not Supported
11	H _{2e} There is a significant and negative relationship between techno-overload and employee's continuance commitment to change.	Not Supported
12	H _{2f} There is a significant and negative relationship between techno-invasion and employee's continuance commitment to change.	Not Supported
13	H _{2g} There is a significant negative relationship between techno-insecurity and employee's continuance commitment to change.	Not Supported
14	H _{2h} There is a significant and negative relationship between techno-uncertainty and employee's continuance commitment to change.	Not Supported

N	Hypotheses Statement		Remarks
15	H _{2i}	There is a significant and negative relationship between techno-overload and employee's normative commitment to change.	Not Supported
16	H _{2j}	There is a significant negative relationship between techno-invasion and employee's normative commitment to change.	Supported
17	H _{2k}	There is a significant and negative relationship between techno-insecurity and employee's normative commitment to change.	Supported
18	H _{2l}	There is a significant and negative relationship between techno-uncertainty and employee's normative commitment to change.	Not Supported
19	H _{3a}	Internal communication will moderate the effect on employee's commitment relationship between role overload and employee's affective commitment to change.	Not Supported
20	H _{3b}	Internal communication moderate relationship between organizational constraints and employee's affective commitment to change.	Not Supported
21	H _{3c}	Internal communication moderate relationship between role overload and employee's continuance commitment to change.	Not Supported
22	H _{3d}	Internal communication moderate relationship between organizational constraints and employee's continuance commitment to change.	Not Supported
23	H _{3e}	Internal communication moderate relationship between role overload and employee's normative commitment to change.	Not Supported
24	H _{3f}	Internal communication moderate relationship between organizational constraints and employee's normative commitment to change.	Not Supported
25	H _{4a}	Internal communication moderate relationship between techno-overload and employee's affective commitment to change.	Not Supported

N	Hypotheses Statement		Remarks
26	H _{4b}	Internal communication moderate relationship between techno-invasion and employee's affective commitment to change.	Not Supported
27	H _{4c}	Internal communication moderate relationship between techno-insecurity and employee's affective commitment to change.	Not Supported
28	H _{4d}	Internal communication moderate relationship between techno-uncertainty and employee's affective commitment to change.	Supported
29	H _{4e}	Internal communication moderate relationship between techno-overload and employee's continuance commitment to change.	Not Supported
30	H _{4f}	Internal communication moderate relationship between techno-invasion and employee's continuance commitment to change.	Not Supported
31	H _{4g}	Internal communication moderate relationship between techno-insecurity and employee's continuance commitment to change.	Not Supported
32	H _{4h}	Internal communication moderate relationship between techno-uncertainty and employee's continuance commitment to change.	Not Supported
33	H _{4i}	Internal communication moderate relationship between techno-overload and employee's normative commitment to change.	Not Supported
34	H _{4j}	Internal communication moderate relationship between techno-invasion and employee's normative commitment to change.	Not Supported
35	H _{4k}	Internal communication moderate relationship between techno-insecurity and employee's normative commitment to change.	Not Supported
36	H _{4l}	Internal communication moderate relationship between techno-uncertainty and employee's normative commitment to change.	Supported

4.12 Conclusion of the Chapter

This chapter compiles the finding of this study. The analysis was carried out in order to examine the relationship between each variable by using explanatory factor analysis, reliability analysis, descriptive analysis, correlation analysis and hierarchical regression analysis. From the above finding, the factor analysis of this study showed only 50 of 92 items run for the further analysis. The cronbach's Alpha value for the independent variables of work stressors (role overload and organizational constraints) and technostress (techno-overload, techno-invasion, techno-insecurity and techno-uncertainty), moderating variable of internal communication and dependent variable of employee commitment to change (affective, continuance and normative) were considered acceptable and good relationship. The findings also revealed four hypotheses were supported in this study and the others thirty-two of the hypotheses were rejected. Next chapter is recommendations and conclusion in relation to the research findings.

CHAPTER FIVE

DISCUSSIONS AND CONCLUSION

5.1 Introduction

This chapter discusses the research result as reported in the chapter four which are related to the research objectives of this study. Finally, this chapter also presents the limitation of the study, recommendation for future study and the overall conclusion of this study.



5.2 Recapitulation of the Research Results

The purpose of this study leads to four research objectives. These objective were (i) to determine the influence of employee work stressors (role overload and organizational constraints) on employee commitment to change (affective, continuance, and normative), (ii) to determine the influence of employee technostress (techno-overload, techno-invasion, techno-insecurity and techno-uncertainty) on employee commitment to change (affective, continuance, and normative), (iii) to determine the moderating effect of the internal communication on the relationship between work stressors (role overload and organizational constraints and) and employee commitment to change (affective,

continuance, and normative), (iv) and to determine the moderating effect of the internal communication on the relationship between technostress (techno-overload, techno-invasion, techno-insecurity and techno-uncertainty) and commitment to change (affective, continuance, and normative).

Overall, four hypotheses were supported based on the objectives of this study while the rest of the hypotheses were not supported in this study.

✚ Objective 1: To determine the influence of employee work stressors (role overload and organizational constraints) on employee commitment to change (affective, continuance and normative).

The result of regression on Table 4.11, Table 4.12 and Table 4.13 showed that only role overload impacted affective and normative commitment to change among respondents in this study, while the others did not showed significant impact on relationship. Thus, below are further discussion regarding the result of this study based on the objective one.

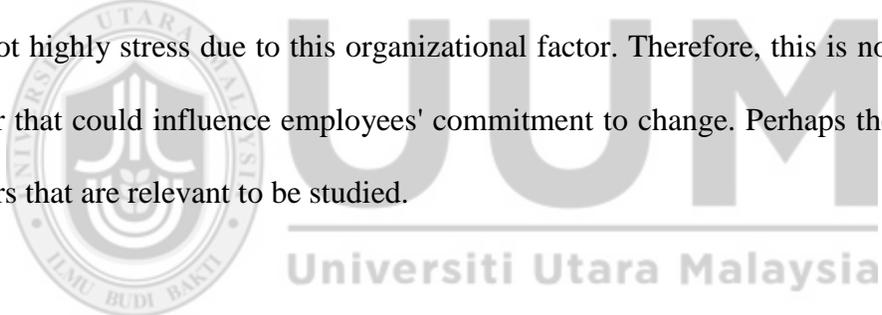
First, the finding of this study indicated that there is a significant and positive relationship between role overload and employee's affective commitment to change. However, this finding was not consistent with the previous study conducted by Malik et al. (2010) which asserted that, role overload was directly and negatively influenced affective commitment to change. The plausible reason for this finding is, based on job characteristic model by Hackman and Oldman (1976,1980) stated that, job characteristics impact an individual's psychological which can lead to some beneficial work outcomes. It means that, when the employees experience such a meaningful job,

this may lead to high internal work motivation and high “growth” satisfaction among the non-academic staff in universities. Besides, increasing in role characteristic can enhance employee skill variety, task identity and tasks significant which typically will give meaningful experience of the work to the employees (Hackman and Oldham, 1976;1980). Generally, the non-academic staff who experience with role overload will face a variety of different work activities and challenges that need them to use of a number of different skills in carrying out the work. This may lead the non-academic staff at the universities to be more skillful and knowledgeable about their duties since they experienced various challenges during perform their job. So, this will impact the non-academic staff’s psychology when they feel appreciated with their work and this can lead to increase their job motivation and commitment to change.

Second, this finding also revealed that role overload is significant and positively related to employee’s normative commitment to change. This finding is not consistent with a previous study by Hamidi and Khatibi (2009) which found that work stress negatively influenced on commitment to change. The plausible reason for this finding could be because when non-academic staff experienced workload they will be more motivated to commit to change because workload can increase their key performance index (KPI). This is because in order to achieve their key performance index (KPI) employees will struggle to complete their work even though have to confront with different role of work at the workplace. Besides, Shah et al. (2011) stated that workload is an advantage and an opportunity for the employees to learn and prosper more quickly. Further, Shah and colleagues also asserted that workload can lead employees to gain more experience which can enrich their exposure and at the same time can be positive leading to

enhanced productivity and commitment to change. Therefore, non-academic staff who possess the capabilities to perform a job typically will enjoy their workload.

Thirdly, this study found that there is no significant influence of organizational constraints on employee commitment to change (affective, continuance and normative). Also, there is no significant relationship of role overload on continuance commitment to change. This finding is incongruent with a previous study by Hamidi and Khatibi (2009) which found that work stress negatively influenced commitment to change. The plausible reason to this insignificant finding could be due to the level of organizational constraints is quite low (mean=2.94), means that universities have enough resources that allows the employees to perform their work. In other word, this means that employees are not highly stress due to this organizational factor. Therefore, this is not a significant factor that could influence employees' commitment to change. Perhaps there have other factors that are relevant to be studied.

 **✚ Objective 2: To determine the influence of employee technostress (techno-overload, techno-invasion, techno-insecurity and techno-uncertainty) on employee commitment to change (affective, continuance and normative).**

The result of regression on Table 4.11, Table 4.12 and Table 4.13 showed that techno-uncertainty found a significant and positive influenced on affective commitment to change. Besides, techno overload also found a significant and positive influenced on continuance commitment to change. Whereas, techno-invasion and techno-insecurity also found significant and negative influenced on normative commitment to change, instead, techno-uncertainty found significant and positive influence on normative

commitment to change. But, the other dimensions of technostress found non-significant influenced on employee commitment to change. Thus, below are further discussion regarding the result of this study based on the objective two.

First, techno-uncertainty in this study found significant and positive influenced on affective commitment to change. This is consistent with a study by Ahmad et al. (2012) which stated that techno-uncertainty was positively influenced on employee commitment; therefore, it is interesting to note that not all stress is bad. This is supported by Anderson and Pulish (2001) that eustress or positive stress is typically desirable for various of reasons but not for the negative stress. The plausible reason for this finding is when employee experienced techno-uncertainty at the workplace they will be more motivated to be highly committed to change because they believe that change is good and therefore this may change techno-uncertainty at the workplace. Besides, they believe that techno-uncertainty will help to generate their knowledge regarding technology innovation and enhance their work performance. So, in order to fulfil the goals of the Malaysian Education Blueprint (MEB) the non-academic staff of UUM, UNiMAP and UiTM Kangar, Perlis need to have a good knowledge, skill and abilities in order to confront with the updating or upgrading of technology at the workplace. Other than that, public servant usually will be provided with a training program on technology if there are new changes regarding technology information, therefore this may increase employee's motivation on techno-uncertainty and at the same time increase their commitment to change. On the other hand, there are also a few studies that are not aligned with this finding such as studies that conducted by Ragu-Nathan (2008) and

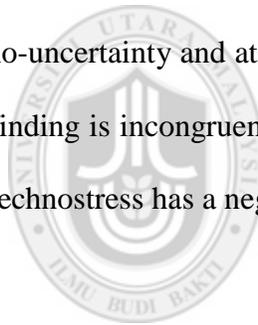
Tarafdar et al. (2007) revealed that the technostress has a negative influence on employee commitment to change.

Second, techno-overload was significantly and positively influenced on employee's continuance commitment to change. This finding was consistent with a study by Ahmad et al. (2012) which asserted that techno-overload is positively related on commitment among the employees in the organization. Based on this finding, when employees experienced the overload of technology they will highly committed to change because they believe that continuing of change is good and therefore this may change their techno-overload at their workplace. This is because, some employees regard heavy workload as a positive challenge that help to increase their quality of work, job performance and job satisfaction that might lead them to highly committed to change at the workplace (Ahmad et al., 2012). This finding also can be supported by job characteristics model by Hackman and Oldham (1976, 1980) which asserted that, job characteristics give impact to an individual's psychological which can lead to some beneficial work outcomes such as an increase in motivation and job satisfaction which may lead them to be highly committed to change. Besides, increase in job characteristic can enhance employee's skill variety, task identity and tasks significant which typically will give meaningful experience of the work to the employees (Hackman and Oldham, 1976; 1980). It means that, when the employees experience such a meaningful work this may lead to high internal work motivation and high "growth" satisfaction among the non-academic staff in universities. However, Tarafdar et al. (2007) found out that, technostress was significantly and negatively influenced on employee commitment to change.

Third, this study indicated that there was a significant and negative influenced of techno-invasion and techno-insecurity on employee's normative commitment to change. The result of this study was consistent with previous researchers such as by Ragu-Nathan, (2008) and Tarafdar et al. (2007) pointed out that technostress is negatively impacted on employee commitment at the workplace. The plausible reason for this finding is when employee experienced less of techno-invasion and techno-insecurity they will be more obligated and highly committed to change because they believe that change is good and therefore this may enhance their quality of work and performance in the organization. Besides, based on demographic factors of this study, majority of respondent was diploma (31.6%) and degree (23.1%) holders that typically would have less adversity to learn about new technology at the workplace. This was supported by Jena and Mahanti (2014) that educational qualification is also one the factor that found positively influenced on technostress, this assumption being that the more educated employees at the workplace would have less anxiety to learn on how to use new technology and usually will learn faster than one's who are less educated employees. Therefore, educational factor can generate and help employees to reduce technostress and to be more committed to change at the workplace.

Fourth, this study finding also indicated a significant and positive influence between techno-uncertainty and employee's normative commitment to change. This study was consistent with a study by Ahmad et al. (2012) stated that techno-uncertainty was positively influenced on employee commitment, therefore, it is interesting to note that not all stress is bad. This was supported by Anderson and Pulish (2001) that good stress

or positive stress has typically desirable for several of reasons but not for the negative stress. The plausible reason for this finding is when employee experienced techno-uncertainty at the workplace, they will be more motivated to be highly committed to change because they feel obligated to get involved to change and therefore this may change techno-uncertainty at the workplace. Besides, they believe that techno-uncertainty will help to generate their knowledge on technology innovation and enhance their work performance. Also techno-uncertainty can lead employee to gain more working experience and knowledge which can enrich their exposure. Other than that, public servant usually will be provided a training program if there are new changes regarding technology information, therefore this may increase employee's motivation on techno-uncertainty and at the same time increase their commitment to change. However, this finding is incongruent with a previous study that conducted by Ragu-Nathan (2008) that technostress has a negative influence on employee commitment to change.



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Fifth, other dimensions of technostress (techno-overload, techno-invasion and techno-insecurity and techno-uncertainty)) are found that they do not influence the employee commitment to change (affective, continuance and normative). For example, techno-overload found incongruent with normative commitment to change. This finding was not consistent with a previous study by Taradar et al., (2007) which asserted that technostress was significantly and negatively influenced on employee commitment to change. The plausible reason to this insignificant finding could be due to other external factors that lead employees not to highly stress to this circumstance. Perhaps there have other factors that are relevant to be studied.

- ✚ **Objective 3: To determine the moderating effect of the internal communication on the relationship between work stressors (role overload and organizational constraints and) and employee commitment to change (affective, continuance, and normative).**

The result of regression on Table 4.10, Table 4.11 and Table 4.12 showed interaction of internal communication on the relationship between work stressors and employee commitment to change. This study found that internal communication moderate the relationship between role overload and affective and normative commitment to change. However, internal communication does not moderate the relationship between role overload and organizational constraints on affective, continuance and normative commitment to change. Thus, below are further discussion regarding the result of this study based on the objective three.

First, this study found that internal communication, moderate the relationship of role overload on affective and normative commitment to change. But there is a negative relationship between internal communication and role overload. Even though mean of internal communication ($m=3.63$) showed slightly above average, which means that internal communication is being practiced at the average level of efficiency, but it failed to play as a moderating role in this relationship. So, it is recommended to find other factors to play as a moderating role, such as work redesign, which probably can influence the relationship between role overload and affective and normative commitment to change among the non-academic staff. According to a previous study Hackman and Oldham (1976) which stated that work redesign is one of the strategies

that can enhance employee productivity and quality which lead them to feel more motivated and satisfied with their work and at the same time may influence them to be highly committed to change.

Second, the finding of this study revealed that internal communication does not moderate the relationship between role overload and continuance commitment to change. This study also found that internal communication does not moderate the relationship of organizational constraints and employee commitment to change (affective, continuance and normative). Even though mean of internal communication ($m=3.63$) showed slightly above average, which means that internal communication is being practiced at the average level of efficiency, but it failed to play as a moderating role in this relationship. So, it is recommended to find other factors to play as a moderating role, such as work redesign, which probably can influence the relationship between work stress and commitment to change among the non-academic staff.

✚ Objective 4: To determine the moderating effect of the internal communication on the relationship between technostress (techno-overload, techno-invasion, techno-insecurity and techno-uncertainty) and commitment to change (affective, continuance and normative).

The result of regression on Table 4.11, Table 4.12 and Table 4.13 showed interaction of internal communication on the relationship between work stressors and employee commitment to change. This study found that internal communication moderate the relationship between techno-uncertainty with affective and normative commitment to

change, while the rest, found not significantly influenced. Thus, below are further discussion regarding the result of this study based on the objective four.

First, the finding of this study revealed that internal communication moderate the relationship of techno-uncertainty on affective and normative commitment to change among the non-academic staff at UUM, UNiMAP and UiTM Perlis. This means that, internal communication play a role as the moderating effect in order to influence employee to be highly committed to change at the workplace. As pointed out by Chitrao (2014) which asserted that good internal communication can increase the productivity, innovation and motivation among the employee and may influence them to change. This due to the reason that, internal communication is a bilateral exchange of the information, thought, ideas, opinion, and feeling that typically will result in positive dialogue and action among the members of organization (Chitrao, 2014). Furthermore, according to Oufi (2011) organization need to provide information regarding changes in order to keep employee knowledgeable and capable to get involved in change. Providing information typically may help to reduce employee technostress and eventually will enhance employees motivation and commitment to change.

Finally, this study also revealed that internal communication does not moderate the relationship between techno-overload, techno-invasion, and techno-insecurity and employee commitment to change (affective, continuance and normative). Also, this study found that internal communication does not moderate the relationship between techno-uncertainty and continuance commitment to change. Even though mean of internal communication ($m=3.63$) showed slightly above average, which means that

internal communication is being practiced at the average level of efficiency, but it failed to play as a moderating role in this relationship. So, it is recommended to find other factors to play as a moderating role, such as work redesign, which probably can influence the relationship between technostress and commitment to change among the non-academic staff.

5.3 Theoretical and Practical Implications

This study provides both theoretical and practical implication. Specifically, this study validated the Social Exchange Theory, Lewin's Three-Steps Change Model and Schein's Three-Stage Model equally influence the employee commitment to change. Furthermore, it has been evidenced that internal communication was as the most essential main factor of determinants the employee commitment to change, which can contribute the theoretical foundation in the area of the change management. Besides, the findings of the relationship of internal communication and employee commitment to change could add to the related literature, hence to compensate the weaknesses in such previous studies. In addition, as well as the researcher focus, no previous studies have empirically tested the moderating effect of internal communication on the relationship between work stressors and technostress on employee commitment to change.

In terms of practical implication, the result of this study provides some suggestion and recommendation to the universities in Malaysia on how to confront with employees when implementing change at the workplace. This study also provides some insights to

the universities in developing the policies accordingly by considering the fact that work stressors and technostress is found to be the determining factor that affect the employee commitment to change as well as the internal communication as a medium that can be used by top management of universities to spread and communicate information regarding change.

5.4 Limitation and Recommendation for the Future Research

There were several limitations that affected the quality of the study. First, the present study concentrated only on all the managerial employees (non-academic staff) of three universities in the northern region of Malaysia which are UUM, UNiMAP and UiTM Kangar, Perlis. So, for the future study, may be it can be conducted at all the public universities in Malaysia. Second, the sample size of this study is only 225 respondents which might reduce and affect the generalizability of the findings and conclusion. So, may be the number of respondents for the future study should be increased so that can get a better result for the study.

Third, this study used the convenience sampling technique to collect data which might also reduce and affect the generalizability of the finding and conclusion. Hence, the researcher suggests that other sampling technique should be used for the future studies. Fourth, this study also just focusing on the employee commitment to change among the employee at three public universities that located in the northern region of Malaysia.

Therefore, in the future studies can make comparisons about the employee commitment to change between public universities and private universities.

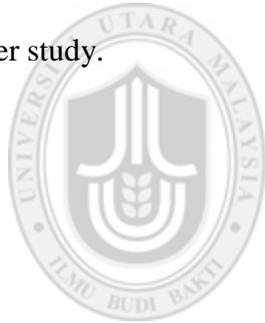
Fifth, this study applied the work stressors and technostress as a factors that effect the employee to give commitment to change at the workplace. Therefore, future studies can applied other factors that impact the employee commitment to change in the institutions. Finally, the present study used internal communication as a moderating effect between relationship of work stressors and technostress on employee commitment to change. Thus, future studies may use others moderating effect such as work design or leadership characteristic in order to enhance the employee commitment to change at the workplace.

5.5 Conclusion



Generally, the purpose of this study is to identify the moderating effect on the relationship between work stressors (role overlaod, role conflict, role ambiguity, organizational constraints, and interpersonal conflict) and technostress (techno-overload, techno-invasion, techno-complexity, techno-insecurity and techno-uncertainty) on the employee commitment to change (affective, continuance and normative) among the non-academics staff at the northern region universities of Malaysia. The findings of this study provide the knowledge and understanding that stress sometimes can be a good stress or positive stress, which can enhance employee commitment to change at the workplace.

Based on the findings result, only four hypotheses were supported and another 32 of hypotheses were not supported in this study. Therefore the supported hypotheses were; (1) relationship between techno-overload and employee's normative commitment to change, (2) relationship between techno-insecurity and employee's commitment to change, (3) internal communication moderate relationship between techno-uncertainty and employee's affective commitment to change (4) and internal communication moderate relationship between techno-uncertainty and employee's normative commitment to change. Besides, the study successfully reached four research objectives and answering the issues of this study. Finally, this study also provides discussion of hypotheses based on regression analysis result, limitation and recommendation for further study.



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