

THE RELATIONSHIP BETWEEN RETENTION FACTORS AND CAREER COMMITMENT

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fulfillment of the requirements for the degree Master of Human Resource Management

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By

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ABSTRAK

Objektif utama kajian ini adalah untuk melihat hubungan antara faktor pengekalan dengan kerjaya komitmen pekerja. Terdapat lima faktor yang mengukur pengekalan pekerja iaitu pampasan, latihan dan pembangunan, sokongan penyelia, dan kenaikan pangkat.

Data dikumpul melalui soal selidik yang diedarkan kepada pekerja Asian Composite Manufacturing (ACM) Sdn. Bhd. (n=253). Analisis korelasi dan regresi dilakukan untuk menguji perhubungan antara pampasan, latihan dan pembangunan, sifat tugas, sokongan penyelia, dan kenaikan pangkat. Dapatkan kajian menunjukkan pampasan, latihan dan pembangunan, sokongan penyelia, dan kenaikan pangkat mempunyai hubungan positif dengan kerjaya komitmen pekerja. Selain itu, keputusan regresi menunjukkan pampasan adalah faktor yang paling penting yang mempengaruhi kerjaya komitmen. Perbincangan tentang dapatkan kajian dan saranan untuk kajian yang akan datang juga diberikan.

ABSTRACT

The main objective of this study is to examine the relationship between retention factors and career commitment. The five factors that measured retention were compensation, training and development, job characteristic, supervisor support and promotion.

Data were gathered through questionnaire survey of employee at ACM Sdn. Bhd. (n=253). Correlation and regression analysis were used of examine the relationship between retention factors and career commitment. The results indicated that compensation, training and development, job characteristic, supervisor support and promotion were positively correlated with career commitment. The multiple regression results suggest that compensation were the most important factors in influencing career commitment. The findings were discussed and recommendations for further research were also addressed.

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LIST OF ABBREVIATIONS

Abbreviation	Description of Abbreviation
ACM	Asian Composite Manufacturing
SPSS	Statistical Package for Social Science
KMO	Kaiser-Mayer Olkin
VARIMAX	Varian Maximum

CHAPTER 1

INTRODUCTION

1.1 Introduction

A question several researchers and those managers and supervisors in organizations may ask is “why should retention of employees be important?” Employee retention and why employees turnover are two most important topics in organizational research. When retention rates are low, extra time and money are spent on recruiting, selecting, and training new employees that could have been spent on other activities like performance improvement or career development of employees (Abbasi and Hollman, 2000; Arkin, 1997; Muchinsky, 1997; Sightler and Adams, 1999). Additionally, with low retention levels organizations may experience a decrease in performance, efficiency, and morale, and an increase in the disorder of social networks, group cohesion, and communication (Sightler and Adams, 1999). As Day (2000) argued, if companies cannot retain their employees, “the economic results could be devastating for an organization. A substantial amount of value could potentially end up employed by a competitor, or . . . become the competition”.

Furthermore, for organizations, the high cost of recruitment and selection (Pfeffer, 1998), the lag and productivity loss during the assimilation period (Davies, 2001), the likely loss of business opportunity (McCallum, 1988; Walker, 2001), poor customer relationship (Clarke, 2001; Messmer, 2000), and hidden cost of loss productivity (Das, 2002) have

subsequently highlighted the importance of retaining committed employees as an aspect of survival for organizations. Here employers seek to treat employees as valued assets who can be a source of competitive advantage through their commitment, trust, adaptability and high quality skills and knowledge (Storey, 1992). This empowerment should increase the competitiveness of the business. Arthur (1994) concluded that by using commitment strategies, organizations had significantly higher performance and lower turnover, compared to those using control strategies.

Thus, to gain employees' career commitment to the organization and increase retention, the employer needs to identify which retention factors more influence to career commitment. Outstanding employees may leave an organization because they become dissatisfied, underpaid, unmotivated, the company not provide training and not give opportunity to get promotion (Coff, 1996), and while trying to retain employees within the organization they may present other challenges as well. They may demand higher wages, not comply with organization practices, and not interact well with their co workers or comply with their supervisor directions. Thus, Munn et al. (1996) found that supervisor support and promotion was the best predictor of career commitment and intention to quit. Similarly, Hatton and Emerson (1998) found that low levels of supervisor support were associated with increased turnover.

In short, incentive compensation is one method which is used to reduce the problems surrounding the effort to retain employees (Sigler and Adam, 1999). Incentive pay may also give the employee the incentive to stay in the organization, provide a competitive

wage so the employee is paid fairly, and encourage the employee to comply with organizational practices. In addition to using pay incentives to reward the employee for reaching company goals and demonstrating loyalty to the organization, efforts can be made by the organization to improve job satisfaction.

In contrast, job characteristics, such as variety and autonomy, are well-established determinants of career commitment (Mottaz, 1988), and are known to be particularly important to management information systems employees (Cougar and Zawaski, 1980). Job autonomy and skill variety are mostly considered as having a beneficial effect on career commitment since they provide individuals with opportunities to change their career (Daniels and Guppy, 1994). The degree of freedom and independence enjoyed by employees and their participation in planning and organizing their work also has an influence on career commitment (Bailyn and Lynch, 1983). According to Marsh and Mannari (1977) the higher level of autonomy that the individual possesses, correlates negatively with turnover.

Interestingly, employees with key information technology skills have become increasingly hard to find. Many companies have realized that proactive strategies are required for building and maintaining a high technology company's knowledge reservoir (Cataldo et al., 2000). Training that focus on continuous learning, retraining and retaining knowledge can decrease the time it takes to move the workforce from intermediate to expert competence, by bridging its technical skills gap. Current skills sets are providing

to be inadequate to meet the rapidly changing, fast paced world of technical and business needs. A top priority is keeping skills fresh, and staying current with emerging technologies (Gable, 1999).

Furthermore, from the review of the retention factors from 1995 to 2004 (McNee, 1998; Dockel, 2004), were used to identify the critical factors in high technology employees' retention. Compensation, job characteristics, training and development opportunities, supervisor support, and promotion were identified as the top five retention factors (Dockel, 2004). This period was specifically chosen because the demand for high technology employees skyrocketed, turnover increased, job hopping became the norm and the shortage of qualified candidates existed. Companies try to keep these valuable employees with their cutting edge knowledge and skills, but the demand for high technology employees with skills has increased substantially, e.g. for ten positions only eight candidates with the required skills qualify (McNee, 1998; Murphy, 2000). To add to this, competitors use aggressive recruitment tactics to try and woo away these valuable employees. Because of this shortage, it has become critical to retain high technology company most valuable technical employees.

Lately, high technology company is not only interested in the retention of employees but also creating a mutually beneficial interdependence with employees. The identified retention factors might serve as a means to demonstrate the organization's support for, or commitment to, their employees and in turn cultivate a reciprocal attachment by

employees (Dockel, 2004). Employees' career commitment is related to their belief that the identified retention factors are motivated by the desire to retain good employees and to be fair in the treatment of employees. Therefore, the present research study seeks to examine the relationship between retention factors and career commitment; the following section will discussed the issue of career commitment.

1.2 Problem Statement

“Why should retention of employees be important?” and “why employee career commitment is important?” are two of the most important topics in organizational research. Many organizations are faced with the imperative task of retaining their employees as well as making sure their employees remain loyal and committed to their organization (Brown and Yoshioka, 2003; Lazarova and Caliguri, 2001). Employee retention is primarily concerned with the reasons employees prefer to remain with their current organization. This is an interesting issue and important question for employer and researcher, especially in the trends of current organization like high technology company. Nowadays, high technology company is struggling to retain their valuable technical employees due to the shortage of experienced candidates and the aggressive recruitment tactics of others in the high technology arena. Thus, here employers seek to treat employees as valued assets who can be a source of competitive advantage through their commitment, trust, adaptability and high quality skills and knowledge (Storey, 1992). This empowerment should increase the competitiveness of the business.

On the other hand, to gain employees' career commitment to the organization and increase retention, the employer needs to identify which retention factors more influence to career commitment. Outstanding employees may leave an organization because they become dissatisfied, underpaid, unmotivated, the company not provide training and development or not give opportunity to get promotion (Coff, 1996), and while trying to retain employees within the organization they may present other challenges as well. They may demand higher wages, not comply with organization practices, and not interact well with their co workers or comply with their supervisor directions. Munn et al. (1996) found that supervisor support was the best predictor of career commitment and intention to quit. Similarly, Hatton and Emerson (1998) found that low levels of supervisor support were associated with increased turnover. Non productive and productive workers end up receiving the same or nearly the same compensation and package of perks because of management's in ability to distinguish talented employees from the rest of the labor force in the organization (Sigler and Adam, 1999).

In contrast, job characteristic are mostly considered as having a beneficial effect on career commitment since they provide individuals with opportunities to change their career (Daniels and Guppy, 1994). The degree of freedom and independence enjoyed by employees and their participation in planning and organizing their work also has an influence on career commitment (Bailyn and Lynch, 1983). According to Marsh and Mannari (1977) the higher level of job autonomy that the individual possesses, correlates negatively with turnover.

Thus, compensation, job characteristics, training and development, supervisor support, and promotion were identified as the top five retention factors (Dockel, 2004). Overall, the justification to select five factors widely utilized by most companies to motivate their employees, it seems reasonable to identify them as a means of examining the effect on career commitment (Turbin and Rosse, 2006).

Therefore, the problem addressed in this study is to observe whether there is any relationship between retention factors and career commitment. Other than that, the research will concentrate on middle/lower employees' level. Middle/lower level employees' perceptions should be considered in order to achieve the organization's objectives. As stated earlier, employees play the main roles of an organization performance. So their perceptions should be considered as they are part of the organization.

1.3 Research Questions

1. Is there a relationship between compensation and career commitment?
2. Is there a relationship between training and development and career commitment?
3. Is there a relationship between job characteristic and career commitment?
4. Is there a relationship between supervisor support and career commitment?
5. Is there a relationship between promotion and career commitment?

6. What is the most significant retention factors (compensation, training and development, job characteristic, supervisor support and promotion) related to career commitment?

1.4 Research Objectives

The research attempts to fulfill the following objectives:

1. To determine the relationship between compensation and career commitment.
2. To explore the relationship between training and development and career commitment.
3. To examine the relationship between job characteristic and career commitment.
4. To investigate the relationship between supervisor support and career commitment.
5. To determine the relationship between promotion and career commitment.
6. To examine the most important retention factors (compensation, training and development, job characteristic, supervisor support and promotion) that related to career commitment.

1.5 Significance of the Study

This study is important at the practical level. First, by identifying which retention factors more influence to career commitment will shed light on how to maintain employee career commitment. Second, it will also provide some ideas to help human resource professionals design career commitment by creating a more committed work environment.

1.6 Organization of Thesis

This thesis comprises of five chapters. *Chapter One* provides the background of the study, the problem statement, objectives of the study, research questions, and the significance of the study. *Chapter Two* focuses on a review of the existing literature related to this study. The chapter discusses the framework developed and the hypotheses formulated for this study. *Chapter Three* discusses the research methodology. This includes research design, instruments of measurement, population, sample, data collection and questionnaire. *Chapter Four* is devoted to the findings of the study. The demographic profiles of the respondents, descriptive analysis, and result of hypotheses testing are presented. At the end of this chapter, a summary of the result is presented. *Chapter Five* recapitulates the study findings followed by discussion. Implications and limitations of the present study are also discussed. The chapter ends for future research with recommendation.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

In this chapter, a review of research from career commitment and retention factors literatures that is relevant to the research topic (the relationship between retention factors and career commitment) are presented. Based on the literature, a framework for understanding the relationship between retention factors and career commitment is presented.

2.2 Career Commitment

According to Poon (2004), careers as an evolving sequence of a person's work experiences overtime. Meanwhile, Lee et al. (2000) defined commitment as an identifiable and specific line of work that an individual engages in to earn a living at a given point in time. However, Vandenberg and Scarpello (2004) define "career commitment" as a person's belief in and acceptance of the value of his or her chosen occupation or line of work and willingness to maintain membership in that occupation. According to Meyer et al. (1993) career commitment is the degree of one's commitment to a particular occupation or profession. Thus, career commitment is concern on the improvement of individual in the organization.

Consistently, career commitment is characterized by the development of personal career goals, the attachment to, identification with, and involvement in those goals. Career commitment should transcend occupations or jobs (Hall, 1976). It is analytically-although not necessarily empirically-distinct from other types of occupational commitment. Similarly, job commitment suggests commitment to a relatively short-term set of objective task requirements. Career commitment which may involve several jobs involves a longer perspective and is related to the subjective (or internal) career envisioned by the individual (Hall, 1976). Organizational commitment suggests commitment to an institution and institutional goals (Randall, 1987). Career commitment, on the other hand, involves self-generated goals and commitment to one's own career, which may lead to employment in several organizations. Professional commitment refers to professional employees' commitment to their professions (e.g., to science, engineering, music) (Parasuraman and Nachman, 1987). Although commitment to a profession typically implies commitment to a career, nonprofessional employees may also be committed to their careers (Hall, 1976).

Indicated, a career will be reflected by his or her persistence in pursuing career goals in spite of obstacles and setbacks that are encountered (Murphy, 2006). One who shows less career commitment will be inclined to make a career change rather than persevere in achieving career objectives. Empirically, lawyer who strongly committed to a career in private practice may endure financial and professional hardship in order to prevail. In contrast, a lawyer with less career commitment would be expected to abandon the pursuit

of a private practice for work with a government agency or a corporation, or perhaps to abandon legal work.

Interestingly, people who committed to their careers should also have an experience more objective career success than those who are less committed. Committed individuals should be willing to make significant investments in their careers (e.g. put forth more effort, acquire new knowledge and skills). One study, for example, found career commitment to predict learning motivation and teach transfer (Cheng and Ho, 2001). In addition, people who committed to their career will likely set high career goals for themselves and put forth effort as well as persist in pursuing these goals even in the face of obstacles and setbacks (Colarelli and Bishop, 1990). Greater effort and perseverance generally leads to higher performance (Bandura, 1993; Locke and Latham, 1990a). High performance, in turn, should result in extrinsic rewards such as higher salaries or promotions (e.g. Greenhaus and Parasuraman, 1993) as well as intrinsic rewards such as self-satisfaction, which stem from positive appraisals that people make of themselves when their performance is successful relative to their internal standards (Bandura, 1986; Locke and Latham, 1990b).

2.3 Retention Factors

Retention factors is utilize as an important topic for managers, organizations, and organizational researchers (Abbasi and Hollman, 2000; Arkin, 1997; Muchinsky, 1997; Sightler and Adams, 1999). Consistently, retention of talented employees can be a source of advantage for an organisation. But there are challenges in attempting to retain these employees (Barney, 1991; Wernerfelt, 1984; Pettman, 1975).

Meanwhile, from the review of these retention factors from 1995 to 2004, were used to identify the critical factors in high technology employees' retention (McNee, 1998; Dockel, 2004). Compensation, job characteristics, training and development opportunities, supervisor support, and promotion were identified as the top five retention factors. This period was specifically chosen because the demand for high technology employees skyrocketed, turnover increased, job hopping became the norm and the shortage of qualified candidates existed. Companies try to keep these valuable employees with their cutting edge knowledge and skills, but the demand for high technology employees with skills has increased substantially, e.g. for ten positions only eight candidates with the required skills qualify (McNee, 1998; Murphy, 2000). To add to this, competitors use aggressive recruitment tactics to try and woo away these valuable employees. Because of this shortage, it has become critical to retain high technology company most valuable technical employees.

On the other hand, according to Dockel (2004) the top five of retention factors are: compensation, job characteristic (skill variety and job autonomy), training and development, supervisor support and promotion. Overall, the justification to select five factors widely utilized by most companies to motivate their employees, it seems reasonable to identify them as a means of examining the effect on career commitment (Turbin and Rosse, 2006).

In addition, the idea that employers should retain and develop their human resources in order to obtain competitive advantage is one of the core beliefs of human resources literature (DeYoung, 2000). Consistently, Storey and Walton (2005) urged that employers to change their employment practices from employee control to one of employee commitment. The goal of control is to reduce direct labour costs, or improve efficiency, by enforcing employee compliance with specific rules and procedures, and base employee rewards on some measurable output criteria (Eisenhardt, 1985). By contrast, commitment strategies shape desired employee behavior and attitudes by forging psychological links between the organization and employee goals. Thus, the focus is on developing committed employees who can be trusted to use their discretion to carry out job tasks in ways that are consistent with organization goals.

Furthermore, Arthur (2004) concluded that by using commitment strategies, organizations had significantly higher performance and lower turnover, compared to those using control strategies. The retention of technical staff has been perceived to be of

strategic importance to high technology employers because of the potential return on them in the long term (Turbin and Rosse, 2006). Thus, managing turnover is an increasing challenge, especially for companies employing high technology professionals. Some of the world's fastest growing technological companies' CEOs reported that the most significant challenge facing them was retaining qualified employees. The American Management Association (2001) currently sees retention as one of the top five business issues. Reasons for this development are:

1. The growing gap between supply and demand for skilled labour (Despres and Hiltrop, 1996).
2. Small companies offer a wealth of opportunities, that very few large companies cannot match. Yet, these work opportunities in small and medium-sized enterprises provide a high level of autonomy and opportunities for high impact jobs (Hall and Moss, 1998).
3. Job mobility is increasing (Despres and Hiltrop, 1996).
4. A shift from the traditional organizational career to a more "protean career" (Hall and Moss, 1998). The individual is managing their own career, and not the organization.

The reason outlined above have a respectably close similarity to this identified by Tsui et al. (1995) retention and career commitment study. Tsui et al. (1995) examined employee retention, productivity, quality and corporate financial success are characterized as that integrated sets of career commitment predictors. The assumption is that integrated sets of

career commitment focusing on produce high levels of employee effective commitment and subsequent organizational performance.

2.4 Compensation

In the subsequence section, discussion regarding financial rewards and benefit packages.

2.4.1 Financial Rewards

Rewards are any objects stimuli or events that (1) increase the probability and intensity of behavioral actions leading to a such objects (learning, also called positive reinforcement), (2) generate approach and consummatory behavior and constitute outcomes of economic decision-making, and (3) induce subjective feelings of pleasure and hedonic. Rewards are of crucial importance for individual and support such elementary processes as drinking, eating and reproduction. Largely similar behavioral processes are engaged for higher order rewards such as money, novelty and cognitive and social rewards. The basic reward objects are polysensory and do not engage specialized reward receptors, and the brain extracts the reward information from visual, auditory, somatosensory, olfactory and other sensory information. The identification of higher order rewards depends on additional cognitive processes. Thus rewards are not defined by the physics and chemistry of their inputs but by the behavioral reactions they induce (Schultz, 2007).

Furthermore, primarily rewards include cash compensation, benefits, and other non cash forms and the work experience. Strategic reward plans go beyond cash to include training and educational opportunities, job redesign, flexible work schedules, stock options and recognition awards such as merchandise and travel. Non cash rewards, such as on-site day care, fitness centers, dry-cleaning services and automatic teller machines, add convenience to employees' daily lives and engender higher loyalty (Deci, 1971). Work-at-home and job-sharing arrangements enable employees to better balance work and family responsibilities and afford employers the necessary flexibility to respond to business needs. The total reward system is defined here to include base salary, variable pay, direct compensation, perquisites, benefits, performance management, training, career development, coaching and other employee-related policies. Combinations of variable pay, recognition and celebration and benefits are essential to providing a total reward package (Milne, 2007).

Currently, many organizations are implementing or planning to implement, reward and/or recognition programs believing that these will help bring about the desired cultural change (Milne, 2007). In some organizations, large amounts of money are being invested in these types of activities and some managers are required specifically to set aside a certain amount from their budgets for this purpose. This rationale is based on the assumption that these types of incentives will encourage employee loyalty, foster teamwork and ultimately facilitate the development of the desired culture that encourages and supports knowledge sharing (Deci, 1971). According to Kanter (1987), many

organizations rewards are differentiated on the basis of status (rather than contribution) and, often, the only way an individual can increase his or her pay is to get promoted. This usually motivates them to “look out for themselves” rather than improve their overall contribution.

Interestingly, rewards systems are frequently used by companies to try to retain staff (Farris, 2000). The reward system that being practiced within the organization has positively affected the performance of their staff. This is due to by implementing the rewards system the staff of which has been rewarded for his good achievement will further motivate him to perform well in doing his job in future, beside that this reward system will also influence the other staff to compete on each other to perform in doing their work as they also are naturally want to be rewarded as well. This kind of healthy competition will subsequently motivate the staff to perform well in doing their job that being assigned to them (Milne, 2007). It is generally accepted that incentives such as rewards and recognition are used in reinforce an organization’s values, promote outstanding performance and foster continuous learning by openly acknowledging role model behavior and ongoing achievement. Both types are dependent on managers recognizing the subordinates’ achievements whether as individuals or as part of teams. Furthermore, rewarding employees is perhaps the most important part of performance management (Robinson, 2007). A happy employee is a productive employee and rewarding an employee whose work is exceptional is a key factor in making sure that

their level of work doesn't deteriorate. Thus, everybody likes to make sure that they are appreciated.

Meanwhile, money is still the primary incentive used to lure information technology professionals. However, most experts agree that money is not the long term answer for hiring, and especially for keeping, skilled high technology employees (Leinfuss, 1998).

According to Higginbotham (1997) high salaries are not essential, but "good" and "fair" salaries showed a strong correlation with intention to stay, indicating that as long as the compensation is competitive, financial rewards are not the primary factor in retention.

Kochanski and Ledford (2001) support this statement, which indicated that the actual level of pay is less important than feelings about pay raises and the process used to administer them. Employees want to understand how the pay system works, and want to know how they can earn pay increases. Once the pay level has been reached other things become important, the intangibles, e.g. career, supervisor support, work and family balance (Tomlinson, 2002).

2.4.2 Benefit packages

Employee benefits and benefits in kind (fringe benefits, perquisites, and perks) are various non-wage compensations provided to employees in addition to their normal wages or salaries (Farris, 2000). Where an employee exchanges (cash) wages for some other form of benefit, this is generally referred to as a 'salary sacrifice' arrangement. In

most countries, most kinds of employee benefits are taxable to at least some degree. For example: housing, group insurance (health, dental, and life), disability income protection, retirement benefit.

Relatively, the purpose of the benefits is to increase the economic security of employees. The term perks or perks is often used colloquially to refer to those benefits of a more discretionary nature (Farris, 2000). Often, perks are given to employees who are doing notably well and/or have seniority. Common perks are company cars, hotel stays, free refreshments, leisure activities on work time (golf, etc.), stationery, allowances for lunch, and when multiple choices exist first choice of such things as job assignments and vacation scheduling. They may also be given first chance at job promotions when vacancies exist.

Furthermore, Pfeffer (1998) argued that rewards system such as a higher salary base, gain sharing, bonuses and employee stock options, act as incentives for employees to be committed and motivated to achieve organizational goals. In a study of 250 employees of a manufacturing operation, Oliver (1990) found a positive correlation ($r=.56$, $p>.01$) between work rewards and commitment. Buchko (1993) suggest that benefit practices can be associated with turnover. He found that in organization in which benefits were a higher percentage of total labor costs and those organizations whose benefits packages were described to be of higher quality, tended to report lower rates of employee attrition.

Buchko suggests that this may be because employees are satisfied with the benefits they received or might be because the rewards and benefits received are binding investments that would induce career commitment. These results imply that size and types of benefits provided for by organization play a significant role in reducing employee turnover.

In addition, Stum (1999) argued that pay and benefits are still the foundation for choosing a new employer or for leaving the present one. He found that benefit such as medical plans, retirement plans, vacation, sick leave and short-term disability are important to employees in that order. His results also showed that stock purchase/ownership plans are benefit plans sharing/cash bonus plans and defined pension plans are the benefit plans that correlated best with employee commitment. Based on his results Stum (1999) concluded that employees are likely to be highly committed to the career when they clearly understand the overall compensation program and believe the compensation program provides internal pay equity.

Lately, high technology employees do not work normal office hours, but work at a pace that invites burnout. Time off, according to Kochanski and Ledford (2001), is more important than any other indirect benefit in predicting retention. High technology employees seem to care about how benefits are administered than about the value of benefits.

As mentioned above, a competitive financial package is a requirement for high technology employees. In addition, DeYoung (2000) supported that the latest retention benefits are of an environmental and personal nature, for instance, luxury automobiles for anyone who has surpassed their goals, pets in the office because high technology workers spend a lot of time away from home, playrooms and quiet rooms to improve team work and reduce stress and on-site gyms for employee to work out their stress.

2.5 Training and Development

Training is provided to workers in order to improve performance and productivity. Lawrie (1990) defined training as changes in skills related to one's job. Training was also described as short-term learning related to an individual's present job (Nadler and Nadler, 1990). Rothwell and Sredl (2000) associated job training with learning interventions that develop skills, knowledge, and attitudes to match current or future job requirements. Job training is a broad term implying all forms of training related to one's job. It can be categorized into many types, such as on-the-job training (OJT), off-job-training, vestibule training, cross training, and planned and unplanned training (Rothwell and Sredl, 2000).

Meanwhile, Lawrie (1990) argued that the usage of knowledge, skills, work experience, good health, and the ability to labor are all important assets to sustaining lives and boosting learning for human beings. Although investments that cultivate these assets can

exist in many forms, all forms of activities and the potential to improve people's capability and incur greater returns are considered investments in human capital. Participation in job training, such as prior education attainment, recurring education, and acquisition of any form of job training, is probably the most important human capital investment over the life cycle. Human capital theory has long been recognized as an underlying theory that is useful in describing social and individual economic development over the life cycle. According to Becker (1993), training and education are the most important investments in human capital, in which increased skills and knowledge of individuals are positively associated with productivity that brings greater earnings. Investment in training was also found to result in increases in wages (Lengermann, 1999). Considering women's "traditional female" role as well as their labor market behaviors, investments in training and education of women may vary with different magnitude of incentive to them (Ehrenberg and Smith, 2000). The major difference in making human capital investments between males and females has been in the length of work life compared to the ability to recoup the costs of the investments (Ehrenberg and Smith, 2000). To better understand the nature of training and education for women, theoretical and empirical studies about the acquisition of women's job training and education are reviewed in the following sections.

Since 1999, employees with key information technology skills have become increasingly hard to find. Many companies have realized that proactive strategies are required for building and maintaining a high technology company's knowledge reservoir (Cataldo et

al., 2000). Training that focus on continuous learning, retraining and retaining knowledge can decrease the time it takes to move the workforce from intermediate to expert competence, by bridging its technical skills gap. Current skills sets are providing to be inadequate to meet the rapidly changing, fast paced world of technical and business needs. A top priority is keeping skills fresh, and staying current with emerging technologies (Gable, 1999).

2.6 Job Characteristic

Stone and Porter (1975) argued that job characteristics is objective attributes about job, as environment, skills for jobs, safety, feedback, new information, interpersonal, compensation, autonomy, and challenge. Hackman and Oldham (1976) pointed that there are five dimensions to job characteristics, such as skill variety, task identity, task significance, job autonomy, and feedback. In contrast, job autonomy and skill variety are mostly considered as having a beneficial effect on career commitment since they provide individuals with opportunities to change their career (Daniels and Guppy, 1994). Thus, high technology employees want to do interesting work that challenges them and uses their skills and talents. Repetitive, narrow work experience with little individual discretion repels high technology employees (Kochanski and Ledford, 2001).

Lately, research has shown that the design of high technology professionals' work content influences the stability of the technical work force (Amabile, 1996). When high

technology professionals view their tasks as challenging with opportunities for learning and information exchange they are also less likely to leave. According to Amabile (1996) and Glynn (1996), high technology professionals, for example, engineers, appeared to be more involved, more satisfied with their jobs, and more committed to the organization than non-technical employees did. High technology professionals view their tasks as challenging with opportunities for learning and information exchange they are also less likely to leave. Job characteristics, such as variety and autonomy, are well-established determinants of career commitment (Mottaz, 1988), and are known to be particularly important to management information systems employees (Cougar and Zawaski, 1980).

2.6.1 Job autonomy

Job autonomy relates to increased feelings of personal responsibility. It is defined as “the degree to which the job provides substantial freedom, independence and discretion to the individual to schedule work and determine the producers used in carrying it out” (Hackman and Oldham, 1980). Discretion in the job has typically been discussed in terms of job autonomy, which reflects the extent to which a job allows the freedom, independence, and discretion to schedule work, make decisions, and select the methods used to perform tasks (Hackman and Oldham, 1975). Increased job autonomy will allow individuals greater flexibility in how they define their role because they will have greater discretion in deciding how to perform the work (Fried, Hollenbeck, Slowik, Tiegs, and Ben-David, 1999; Troyer, Mueller, and Osinsky, 2000).

Consistently, according to Hackman and Oldham (1980), individuals tend to believe that their work outcomes depend substantially on their own efforts, initiatives, and decisions when job autonomy is given. As job autonomy increases, workers are more likely to feel responsible for their jobs, and consequently “they are more willing to accept personal accountability for the outcomes of their work” (Hackman and Oldham, 1980). In addition, job autonomy may increase career commitment in practice by letting individuals design their work processes that fit their needs/schedules. For instance, Batt and Valcour (2003) suggest that job autonomy in decision making translates into the employee’s ability to control decisions, such as when, and how to integrate work and family responsibility

Empirically, high technology professionals have a reasonable degree of autonomy in their application of that knowledge. Although high technology professionals rarely decide on the organizational policy to which their expertise contributes, there is a reasonable degree of autonomy in the process of performing their work (Bailyn and Lynch, 1983). When job autonomy is high, workers will view their work outcomes in terms of their own efforts, initiatives and decision, rather than instruction of the supervisor or procedure (Marx, 1996).

Relatively, according to Dubie (2000) high technology employees enjoy the autonomy they in their current jobs. This relates to the elusive factor that high technology

employees are looking for i.e. empowerment. Agarwal and Ferrat (1999) established that successful information technology organizations are devoting resources toward empowering information technology professionals to take responsibility for their work and decision-making.

Based on the above discussion the degree of freedom and independence enjoyed by employees and their participation in planning and organizing their work has an influence on career commitment (Bailyn and Lynch, 1983). According to Marsh and Mannari (1977) the higher level of autonomy that the individual possesses, correlates negatively with turnover.

2.6.2 Skill Variety

Skill variety is defined as “the degree to which a job requires a variety of different actives in carrying out the work, involving the use of a number of different skills and talents of the person” (Hackman and Oldham, 1980). This may include variety in the level of skill needed to complete assignments. Having variety of skill includes task enrichment activities and the opportunity to learn something the learner perceives as useful. Adults comprise the community of online learners and adults tend to have a high desire for growth through learning.

Meanwhile, technology employees will leave the organization if their skills are underutilized. McEachen (2001) reported that high technology employees had skills and training, but are not fully utilized, e.g. a software architect who ends up in a supportive role. High technology companies are addressing the personal needs of their employees to enhance retention. Some firms keep high technology professionals satisfied by giving them a chance to be creative, master different skills and pursue projects that interest them (Merrick, 2008).

Consistently, when a task requires, an employee to stretch his/her skills and abilities, the task is almost invariably experienced as meaningful by the individual. When a job draws on several skills of an employee, they may find the job to have highly personal meaning even if it is, not of great significance or importance (Marx, 2006).

2.7 Supervisor Support

Supervisor support is defined as the degree to which employees form impressions that their superiors care about their well-being, value their contributions, and are generally supportive (Eisenberger et al., 2002). Supervisors who are deemed to be supportive have been found to be effective in managing subordinate emotions. Managing subordinate emotions is a critical component in managing career commitment.

Empirically, according to Hutchison (1997) research showed that caring and supportive treatment by supervisors was positively associated with affective commitment. Because supervisors act as agents of the organization, they have direct responsibility for directing, evaluating and supporting their subordinates. Accordingly, subordinates view supervisor support as a personal extension of the organization (Eisenberger et al., 1986; Levinson, 1965). Organizational support theory suggests that the actions of its agents are indicators of the organization's intent (Levinson, 1965). Agents help personify the organization to the employee. Immediate supervisors are typically the closest organizational link to the employee and have the ability to communicate the organization's intentions directly to their subordinates.

Meanwhile, supervisor support has been shown to affect employees in several ways. For example, Kalliath and Beck (2001) found that strong supervisor support helped reduce burnout and intentions to quit. Munn et al. (1996) found that supervisor support was the best predictor of career commitment and intention to quit. Similarly, Hatton and Emerson (1998) found that low levels of supervisor support were associated with increased turnover.

Consistently, according to Eisenberger et al. (1986) and Levinson (1965), subordinates view supervisor support as a personal extension of the organization. Organizational support theory suggests that the actions of its agents are indicators of the organization's intent (Levinson, 1965). Agents help personify the organization to the employee. Immediate supervisors are typically the closest organizational link to the employee and

have the ability to communicate the organization's intentions directly to their subordinates.

Interestingly, a number of researchers have documented the association between supervisor and the protégé's level of organizational commitment (e.g. Ayree and Chay, 1994; Payne and Huffman, 2005). Such researchers agree that supervisor effects protégé commitment by fostering positive psychological feelings about their career. Viator and Scandura (1991) add that supervisor promotes protégé identification with the organization. Moreover Scandura (1997) suggests that supervisor nurtures positive attitudes in protégé's through providing a role model and by increasing coping and stress management skills. The aforementioned benefits explain the positive association between supervisor and protégé career commitment.

Consistently, supervisor support refers to supervisory behavior that sustains high technology employee's innovation. Most valuable high technology employees are staff with critical innovation skills, the people with knowledge of core products or service. Thus, researchers have clearly recognized the role of supervisory support in employee empowerment (Amabile, 1993; Spreitzer, 1995). Conger (1988), cited in Ramus and Steger (2005) define empowerment as "the motivational concept of employees' feelings (self-efficacy) that they can influence their work". Spreitzer (1995) differentiated psychological empowerment from situational empowerment and defines the former as "an active orientation of the individual that reflects that individual's belief that he/she

shapes his/her work role and context". Bowen and Lawler (1992) and Spreitzer (1995) described two consequences of psychological empowerment as "effectiveness" and "innovative behavior". Thus, work environments that support employees' sense of empowerment are directly linked to innovations.

2.7.1 Recognition from Supervisors

Everd and Selman (1989) argued that in participate work environment, acknowledgement, creation and liberation of employees are valued and emphasize individual contribution and initiative (Lawler, 1992). Such work environments recognize the critical human capital as necessary for the success of an organization, and the importance of employees' creativity and initiative for organizational responsiveness in a competitive external environment (Bowen and Lawler, 1992). These work environments thus facilitate cognitions of empowerment.

Meanwhile, lack of personal recognition translates to the employee as a lack of success (Agarwal and Ferratt, 1999). Regardless of the organizational level, employees want to feel good about themselves and their work, have a sense of purpose, and to be recognized when they do their jobs well. Most information technology professionals' motivation comes from the recognition they get from managers for a job well done and the feeling that they are an important part of the organization (Agarwal and Ferratt, 1999).

Based on the above discussion have a respectably close similarity with identified with Eisenberger et al. (2002) supervisor support study. Eisenberger et al. (2002) examined that employees' satisfaction with their immediate recognition from supervisor has been shown to reduce voluntary turnover and improve commitment. In addition to the organization and supervisors, mentors can also serve as a source of support.

2.7.2 Feedback from supervisors

In order for individuals to feel empowered they must understand the goals of their work unit and how their own can contribute to those goals (Spreitzer, 1996). Social cognition theory suggests that access to information facilitates self-efficacy (Gist & Mitchell, 1992). Access also facilitates “sense-making” which is especially important during times of high uncertainty (Weick, 1979).

Empirically, according to Eisenberger et al. (2002) affective commitment may be enhanced under conditions of high feedback. As individuals are provided with praise and feedback, stronger feelings of loyalty to the organization may develop. Overall, most of the high technology employee's work is tacit and often ambiguous and difficult to measure. Kochanski and Ledford (2001) argued that high technology employees value the feedback from their co-workers and supervisors. Providing sufficient performance feedback to employees (Greenhaus, 1987) helps bolster positive attitudes toward the organization, and helps prevent early intentions to leave the organization.

2.8 Promotion

A promotion is the advancement of an employee's rank or position in an organizational hierarchy system (Steger, 2003). Promotion may be an employee's reward for good performance i.e. positive appraisal. Before a company promotes an employee to a particular position it ensures that the person is able to handle the added responsibilities by screening the employee with interviews and tests and giving them training or on-the-job experience. A promotion can involve advancement in terms of designation, salary and benefits, and in some organizations the type of job activities may change a great deal (Kanouga, 2001). The opposite of a promotion is a demotion.

Empirically, promotion in a business organization is a practice for recognizing and rewarding employees' effort and contribution to the group. It is usually symbolized with a change of job and title (Kanouga, 2001). It can be attached with an increase in pay, power, and responsibility. Or, it can also include an increase in freedom or independence, or a decrease in danger or discomfort. It may mean less inconvenience in terms of hours or location for some employees.

Based on the above discussion, employees often feel satisfied with these incentives and stimulated to perform better in the new job. They are motivated to increase their knowledge or skill and to gear for higher levels of productivity. With better jobs, employees may decline any opportunities at other companies. Hence, promotions can increase employees' loyalty to the company and reduce turnover at lower levels.

2.9 Relationship between Career Commitment and Retention Factors

This section discusses the relationship between: (1) career commitment and compensation, (2) career commitment and training and development, (3) career commitment and job characteristic, (4) career commitment and supervisor support, and (5) career commitment and promotion. The relationship between the variables will also be discussed.

2.9.1 Career Commitment and Compensation

Modern society values acquisition. Compensation offers an opportunity for security, autonomy, recognition and an improved self worth (Hoyt and Gerdloff, 1999). These increased feelings of self worth and importance should lead to effective commitment. Mathieu and Zajac (1990) indicated a low positive correlation between salary and commitment ($r=0.182$). Igbaria and Greenhaus (1992) found salary to be positively related to commitment and negatively related to turnover.

Meanwhile, salary generally represents the “side bet theory” (Becker, 1960). According to this theory, employees make certain investments or side bets, e.g. shorter organizational tenure versus larger pension, in their organizations. Such an investment is a sunken cost, which reduces the attractiveness of alternative employment opportunities, and thereby increases continuance commitment (Sethi et al., 1996).

Lately, in light of current concerns in the UK about scientists salaries, particularly those in universities, it is also important to establish whether salary level relates to scientists' career commitment, and their attitude towards leaving the profession. Previous work suggests that salary correlates positively with career commitment. Lee et al. (2000), for example, suggest that higher incomes increase commitment to careers by enhancing self esteem. We hypothesize that scientists on higher salaries will be more strongly committed to their career and will be less likely to intend to leave.

Meanwhile, compensation is one method which is used to reduce the problems surrounding the effort to retain Employees. By aligning the interests of the employees with the owners of the firm through pay incentives, the agency problems of excessive perquisite consumption, shirking and poor investment decision making may be reduced. Incentive pay may also give the employee the incentive to stay in the organization, provide a competitive wage so the employee is paid fairly, and encourage the employee to comply with organizational practices (Sigler, 1999). In addition to using pay incentives to reward the employee for reaching company goals and demonstrating loyalty to the organization, efforts can be made by the organization to improve job satisfaction. This may also increase the numbers of talented employees who stay in the company.

2.9.2 Career Commitment and Training and Development

According to Raghunathan (1998) the difficulty of the retention of qualified information technology personnel cannot be understated, and a particular problem in the retention of information systems personnel is attributed to their “higher growth needs” (Cougar and Zawacki, 1980). Training is essential for the livelihood of any information technology worker, and is the only way employment can be maintained over their careers.

Interestingly, according to Tomlinson (2002) suggests it is critical that organizations keep the leading edge by having their employees well trained in the latest technologies. Employees stay at companies that promote career opportunities through learning and the ability to apply their newly learned skills (Cataldo et al., 2000; Jiang and Klein, 2000).

Furthermore, the primary mechanism by which training is predicted to increase career commitment is through increased self worth and importance. Tsui et al. (1995) and Agarwal and Ferratt (1999) argued that job rotation programmes, mentoring and training convey to employees that the organization considers human resources to be a competitive advantage and that it is seeking to establish a long-term relationship with them.

Overall, employee training is intended to provide an opportunity for advancement and might be perceived as “the organization values them and bolster their sense of self worth,

therefore building a stronger affective commitment" (Meyer and Allen, 1997). Training, if put to use on the job, should increase affective commitment through its link to increased job scope. This response can be a function of closer psychological attachment to the organization and its goals (McElroy, 2001). Paré et al. (2001) found training to be positively related to affective commitment ($r=0.384$).

Consistently, Chang (1999) stated that company-provided training might affect the psychological states of employees. When employees believe that the company is doing a good job of providing proper training, they feel that the company is concerned with improving an employee's skill and ability, making them attached to their company. If training is perceived as providing organization-specific skills that contribute to status or economic advantage within the company, but will not transfer to jobs outside the organization, a stronger continuance commitment will develop. Extensive training should have little effect on continuance commitment, unless the training involves organization-specific skills. Paré et al. (2001) found training to be negatively related to continuance commitment ($r=-.02$).

Furthermore, employees who are aware of the expense of training, or appreciate the skills have acquired, might develop a sense of obligation (normative commitment). This will hold them in the organization at least long enough to "reciprocate". The employees might develop a moral obligation to give the organization its money's worth (normative commitment), particularly if the company funds the training (McElroy, 2001).

Overall, company-provide training may also affect the psychological states of employees. When they believe that the company is doing a good job in providing proper training, they feel that the company is concerned with improving an employee's skill and ability, making them become attached to their company. Aryee and Tan (1992) studied the career commitment among teachers and nurses in Singapore and found that those who were committed to their profession did so to keep up with new developments in the profession and attend additional skills training.

2.9.3 Career Commitment and Job Characteristic

In the subsequence section, discussion regarding career commitment and job autonomy also career commitment and skill variety.

2.9.3.1 Career Commitment and Job Autonomy

The degree of freedom and independence enjoyed by employees and their participation in planning their work has an influence on career commitment (Baylin and Lynch, 1983).

According to Marsh and Mannari (1977) the higher level of autonomy that the individual possesses, correlates negatively with turnover.

Empirically, according to Hackman and Oldham (1980), individuals tend to believe that their work outcomes depend substantially on their own efforts, initiatives, and decisions

when job autonomy is given. As job autonomy increases, workers are more likely to feel responsible for their jobs, and consequently “they are more willing to accept personal accountability for the outcomes of their work” (Hackman & Oldham, 1980). In addition, job autonomy may increase career commitment in practice by letting individuals design their work processes that fit their needs/schedules. For instance, Batt and Valcour (2003) suggest that job autonomy in decision making translates into the employee’s ability to control decisions, such as when, and how to integrate work and family responsibility

2.9.3.2 Career Commitment and Skill Variety

Skill variety is defined as “the degree to which a job requires a variety of different actives in carrying out the work, involving the use of a number of different skills and talents of the person” (Hackman and Oldham, 1980). This may include variety in the level of skill needed to complete assignments. Having variety of skill includes task enrichment activities and the opportunity to learn something the learner perceives as useful. Adults comprise the community of online learners and adults tend to have a high desire for growth through learning.

Meanwhile, when people have a chance to develop and utilize their skills at work, such as problem-solving, taking initiative and active learning, it encourages self-confidence and a proactive stance, which may lead to career commitment (Byrne, 1966). Mathieu and Zajac (1990) found a medium positive correlation ($r_t=0.207$) between skill variety

and career commitment. One way that individuals may develop a sense of competency is by working in a job with high skill variety (Hackman and Oldham, 1975, 1976). Skill variety relates to feelings of belonging and sense of attachment to the organization (Meyer and Allen, 1991). Skill variety is thus more related to attitudinal commitment than continuance commitment because of the increased feelings of belonging.

2.9.4 Career Commitment and Supervisor Support

According to Eby et al. (1999) indicated the work environment is characterized by participation in important work related decisions, supervisory feedback and support and rewards, that are perceived as fair and equitable (Bandura, 1986). This provides individuals with the chance to make a difference on the job, try out new skills, exercise discretion and receive feedback on their performance. These work conditions are expected to increase individuals' intrinsic motivation by providing affirmation that their efforts are worthwhile and valued (Thomas and Velthouse, 1990). The proposed outcomes of this mastery-based motivation are affective commitment to the organization and general job satisfaction. In turn, these affective work reactions are expected to impact outcomes such as turnover and absenteeism.

Consistently, Pare et al. (2001) indicated that recognition from the supervisor was found to be related to be related to affective commitment but not to continuance commitment. The reason for this might be that high technology employees explore new solutions and

get feedback and recognition from supervisors, which increases their feelings of self worth, and not their obligation to stay at the company.

Overall, Rhoades and Eisenberger (2002) concluded that supervisor support is a strong indicator of organizational support, but this relationship varies widely across studies. Eisenberger et al. (2002) found that a likely explanation for this variance is due to the perceptions of how the supervisor is valued in an organization. Supervisor status, tenure, and upward (or outward) mobility, all contribute to how they are perceived by their subordinates. It is plausible that in organizations in which supervisors are perceived as powerful, there may be a stronger effect on employee career commitment and job search intentions. Finally, the extent to which employees identify with their organizations as well as the reputation of the organization may also affect employee perceptions of organizational support. Working for the local employer of choice may be so highly valued by employees that the employer-employee relationship transcends any individual level relationships formed.

2.9.5 Career Commitment and Promotion

It has been shown that employees are more committed to an organization when they believe that company pursues a promotion from within policy (Gaertner and Nollen, 1989). If they believe a promotion within policy, they would feel less uncertainty

regarding the future of their career in the company, becoming more motivated to commit themselves.

Overall, employees often feel satisfied with these incentives and stimulated to perform better in the new job. They are motivated to increase their knowledge or skill and to gear for higher levels of productivity. With better jobs, employees may decline any opportunities at other companies. Hence, promotions can increase employees' loyalty to the company and reduce turnover at lower levels.

2.10 Conclusions

This chapter had presented a review of literature that focused on the relationship between retention factors and career commitment. The following chapter describes in detail the procedures and methodology that were used for data collection and analysis in this identification.

CHAPTER 3

METHOD

3.1 Introduction

This chapter presents of the research design and method used in this study. The discussion begins with an overview of the research study, a discussion of the population, and description of the instrument selected for the data gathering and the procedures used in the study.

3.2 Research Design

As stated earlier in Chapter 1, the purpose of this study was to examine the relationship between retention factors and career commitment. Therefore, a correlational study is engaged. According to Cavana, Delahaye and Sekaran, (2001), correlational study is a study that specifically used to identify the relationship between important factors (referred as independent variable) and the problem (referred as dependent variable).

In order to gather the data to examine such a relationship, a quantitative method was employed. This is because quantitative method allows statistical analyses that will assure

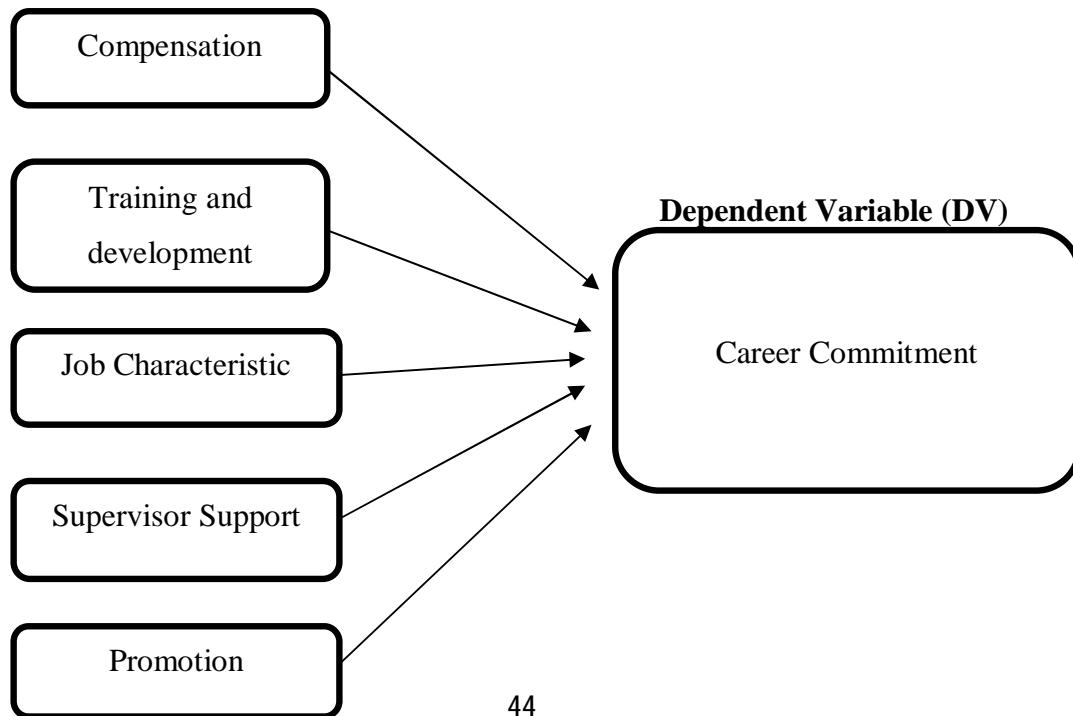
the gathered data are reliable and valid (Ghauri, 1995). Thus, a set of questionnaire were employed as an instrument for this study.

3.3 Research Framework

The research framework is developed based on the factors discussed in the literature review in Chapter 2. Retention factors are the independent variable and career commitment being the dependent variable. The objective of this study is to examine the relationship between compensation, training and development, job characteristic, supervisor support, promotion and career commitment.

Figure 3.1 Research Framework

Independent Variables (IV)



3.4 Hypotheses

The six hypotheses that will be tested are:

- **H1:** There is a relationship between compensation and career commitment.
- **H2:** There is a relationship between training and development and career commitment.
- **H3:** There is a relationship between job characteristic and career commitment.
- **H4:** There is a relationship between supervisor support and career commitment.
- **H5:** There is a relationship between promotion and career commitment.
- **H6:** There is a relationship between overall retention factors (compensation, training and development, job characteristic, supervisor support, promotion) and career commitment.

3.5 Instrumentation

The questionnaires distributed in English and consist of three sections. In the first section, respondents asked to give demographic information. The second section contains 8 items that measure career commitment. The last section contains 12 items on compensation, 9 items on training and development, 10 items on job characteristic, 7 items on supervisor support and 10 items which measure promotion.

Table 3.1
The description of questionnaire's section

Questionnaire sections	Descriptions
Section 1	This section consists of respondent's demographic profile such as gender, race, education background, length of service in high technology sector, age and professional qualification.
Section 2	This section comprises of 8 questions to measure career commitment
Section 3	This section contains 48 questions on measuring compensation, training and development, job characteristic, supervisor support and promotion

For this study, six variables used to measure independent variable (compensation, training and development, job characteristic, supervisor support and promotion) and dependent variable (career commitment). The subsequence section explains the variables that were employed for each of the variables.

3.5.1 Career Commitment

The career commitment scale designed by Ellemers et al. (1998) was employed for the study. The scale contains six items with a reliability coefficient of 0.88 (Sunday and David, 2007). The test items were positively worded with response anchors on a five-

point Likert scale where: 5 = strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree and 1 = strongly disagree. A high score is, therefore, indicative of strong commitment to a person's career.

Table 3.2

Operational definition and items for career commitment

Variable	Operational Definition	Items
Career Commitment	Commitment to "an identifiable and specific line of work that an individual engages into earn a living at a given point in time"	<ol style="list-style-type: none"> 1. My career is one of the most important things in my life. 2. I regularly consider what I could do to get ahead at work. 3. I am prepared to do additional chores, when this benefits my career 4. The ambitions in my life mainly have to do with my career. 5. My career plays a central role in my life. 6. I think that I should have a successful career. 7. I think choosing new career. 8. This career really inspires the very best in me in the way of job performance.

Source: Ellemers et al. (1998)

3.5.2 Development of Retention Factors Measurement Scale

According to Dockel (2004) the top five of retention factors are: compensation, job characteristic (skill variety and job autonomy), training and development, supervisor support and promotion. Therefore, the justification to select five factors widely utilized by most companies to motivate their employees, it seems reasonable to identify them as a means of examining the effect on career commitment (Turbin and Rosse, 2006).

3.5.2.1 Compensation

Heneman and Schwab (1985) developed the Pay Satisfaction Questionnaire (PSQ), to assess five dimensions of satisfaction with pay (level, benefits, raises, and structure/administration). The results on two heterogeneous samples of employees provided support for the multidimensional hypothesis, although the four dimensional solution (level, benefits, raises, structure/administration) provided better representation of the variance in the items studied. Heneman and Schwab (1985) show high internal consistency reliabilities for the four scales: pay level (0.94), pay increase (0.93), pay structure (0.84), employee benefits (0.85), and pay administration (0.90).

Heneman and Schwab (1985) have shown that pay satisfaction is a multidimensional construct, and that the antecedents and consequences of pay satisfaction can vary according to the various dimensions of compensation. According to Heneman and Schwab (1985) compensation should be viewed in five dimensions: pay level, pay

increase, pay structure, employee benefits, and pay administration. Responses were on a five-point Likert scale (1 = strongly dissatisfied to 5 = strongly satisfied).

Table 3.3

Operational definition and items for compensation

Dimension	Operational Definition	Items
Compensation	Compensation defined as an important capability of employee for organizations, related to the impacts of employee ability and optimal levels of performance	<ol style="list-style-type: none"> 1. My benefit package. 2. The number of benefits I receive. 3. The value of my benefits. 4. My most recent raise. 5. How my raises are determined. 6. The information about pay issues provided by the company. 7. Consistency of the company's pay policies. 8. How the company administers pay. 9. My current total salary package (base pay, benefits and incentives). 10. The competitiveness of my total salary package (base pay, benefits and incentives). 11. Influence my supervisor has on my pay. 12. The Company's pay structure

Source: Heneman and Schwab (1985)

3.5.2.2 Training and Development

Rogg et al. (2001) completed a study on the indirect effects of human resources practices on customer service. Rogg et al. (2001) reported a Cronbach alpha coefficient of .77 to .87 for training and development opportunities. Responses were on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree).

Table 3.4
Operational definition and items for training and development

Dimension	Operational Definition	Items
Training and Development	Training and development as the process improvement of knowledge, skill, and ability of employees.	<ol style="list-style-type: none">1. This company is providing me with job specific training.2. I can apply the training I receive, in this organization.3. There are enough development opportunities for me in this company.4. I have the opportunity to be involved in activities that promote my professional development.5. Employees are sponsored for training programmes on the basis of carefully identified developmental needs.6. Human relations competencies are adequately developed in your organization through training in human skills.7. Training of workers is given adequate importance in your organization.8. Employees in the organization participate in determining the training they need.9. The HR department conducts briefing and debriefing sessions for employees sponsored for training.

Source: Rogg et al. (2001).

3.5.2.3 Job Characteristic

Stone and Porter (1975) argued that job characteristics is objective attributes about job, as environment, skills for jobs, safety, feedback, new information, interpersonal, compensation, autonomy, and challenge. One of the best conceptualizations of job context variables is in the theory proposed by Hackman and Oldham (1975, 1976). Their job diagnostic survey (JDS) was used with two items comprising each dimension (i.e. skill variety and job autonomy). Fried and Farris's (1987) meta- analyses reported a Cronbach alpha coefficient in the range of 0.60 to 0.94. The test items were positively worded with response anchors on a five-point Likert scale where: 5 = strongly agree, 4 = Agree, 3 = Neutral, 2 = Disagree and 1 = strongly disagree.

Table 3.5
Operational and items for job characteristic

Dimension	Operational Definition	Items
Job Characteristic	The attributes about job, as environment, skills for jobs, safety, feedback, new information, interpersonal, compensation, autonomy, and challenge.	<ol style="list-style-type: none">1. The job requires me to use a number of complex or high level skills.2. The job gives me opportunities to use my personal initiative or judgment in carrying out the work.3. The job is quite simple and repetitive.4. The job gives me considerable opportunity for independence and freedom.5. Just doing the work required by the job provides many changes for me to figure out how well I am doing.

-
- 6. The job requires me a lot of cooperative work with other people.
 - 7. The job is arranged so that I am responsible for an entire piece of work from beginning to end.
 - 8. Co-worker on this job gives me “feedback” about how well I am doing my work.
 - 9. Supervisor often let me know how well they think I am performing on the job.
 - 10. The job itself provides clues about whether or not I am performing well.
-

Source: Hackman and Oldham (1975, 1976).

3.5.2.4 Supervisor Support

Supervisor support is defined as the degree to which employees form impressions that their superiors care about their well-being, value their contributions, and are generally supportive (Eisenberger et al., 2002). Only the two components of supervisor support were used in this study, recognition from supervisor and feedback from supervisor.

i. Recognition from supervisor

Ramus and Steger (2000) used learning organization literature and interviews at leading-edge companies as the basis for defining those supervisory behaviors that support employee creativity. Their research demonstrated factors of organizational encouragement and supervisory encouragement that have been shown in the literature to support employee creativity in general. A few of the rewards and recognition questions were used as part of the supervisor support measurement scale. Ramus and Steger (2000) reported a Cronbach alpha coefficient of 0.68 for recognition from supervisor questions.

ii. Feedback from supervisor

Good and Fairhurst (1999) used the job context framework to test the expectations of retail trainees. The feedback from supervisor questions was used as part of the supervisor support measurement scale. Feedback from the supervisor forms part of the Job Diagnostic Survey (Hackman & Oldham, 1980) and Fried and Farris's (1987) meta-analyses reported a Cronbach alpha coefficient in the range of 0.70 to 0.94. Responses were on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree).

Table 3.6

Operational definition and items for supervisor support

Dimension	Operational Definition	Items
Supervisor Support	Supervisor support defined as the feedback of check and balance mechanism of employee work.	<ol style="list-style-type: none">1. My supervisor looks for opportunities to praise positive employee performance, both privately and in front of others.2. I feel undervalued by my supervisor.3. The supervisor almost never gives me any "feedback" about how well I complete my work.4. My supervisor seldom recognizes an employee for work well done.5. My supervisor often lets me know how well he thinks I am performing the job.6. My supervisor rewards a good idea by implementing it.7. My supervisor cares about my well-being.

Source: Ramus and Steger (2000), Good and Fairhurst (1999).

3.5.2.5 Promotion

A promotion is the advancement of an employee's rank or position in an organizational hierarchy system (Steger, 2003). Promotion measure was proposed by Greenhaus et al. (1990) as an external perspective, which is judged by an organizational manager's advancement prospects. The managers were asked to assess the extent to which their employees are likely to be promoted in the organization. Responses were on a five-point scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The Cronbach's alpha for this scale was 0.78 (David, 2003).

Table 3.7
Operational definition items for promotion

Dimension	Operational Definition	Items
Promotion	The advancement of an employee in an organizational	<ol style="list-style-type: none">1. The company provides opportunities for career advancement.2. I have good chance for promotion.3. I have fairly good chance for promotion.4. My company always gives promotion based on ability.5. Opportunities for promotion are limited.6. When I think of my career six months from now, I envision myself in a position with more responsibility.7. If my boss or supervisor told me I was being promoted, the fact that they had so much confidence in my abilities.8. I've reached the point where I feel I have

learned as much as I possibly can in my present position.

9. An employee's promotion is important to this organization.
 10. Promotion exercise is held regularly.
-

Source: Greenhaus et al. (1990)

3.6 Sampling Design

The populations of this study were the middle/lower level employees of Asian Composite Manufacturing (ACM) Sdn. Bhd situated in Bukit Kayu Hitam, Kedah. The total populations of the study were 700 (N) employees that worked at the Asian Composite Manufacturing's (ACM) Sdn. Bhd. According to the sample determination table provided by Sekaran (2006), the appropriate sample size for population of 700 is 258 (n). Thus, these 258 sample size would draw conclusions about the entire population of Asian Composite Manufacturing (ACM) Sdn. Bhd in Bukit Kayu Hitam, Kedah. In order to identify the subject of this research, random sampling techniques were used because it is least bias and offers the most generalizability.

3.7 Data Collection

Before survey was carried out, initial contacts with targeted company (that is Asian Composite Manufacturing's (ACM) Sdn. Bhd.) were made on April 6th, 2009 by formal

letter whereby a sample copy of the questionnaire was attached. As a result of these contacts, HR manager of ACM Sdn. Bhd. Agreed to participate in this study.

This is a cross-sectional study, which utilized questionnaire surveys to collect the primary data. The data collection processes were carried out on April 20th, 2009 at the café of ACM Sdn. Bhd. The questionnaires were distributed to 258 respondents at ACM Sdn. Bhd. In order to distribute the questionnaires, self-administrated techniques were used by researcher. This technique was chosen because data could be collected from the respondents within a short period that is between three hours after the questionnaires were distributed. For this study, to increase the sample size of the study, researcher requested the aid the Human Resource Executive from Asian Composite Manufacturing (ACM) Sdn. Bhd., Bukit Kayu Hitam, Kedah. Distribute 92 set of questionnaires to other employees in ACM Sdn. Bhd., Bukit Kayu Hitam, Kedah. Besides that, a total of 350 set of questionnaire were distributed. Of those 350 set of questionnaires, 320 were returned. From these 320 set 10 of returned questionnaires were rejected due to incompleteness. The 310 usable questionnaires for further analysis.

3.8 Data Analysis

The latest version (2008) of the Statistical Package for the Social Sciences (SPSS 16.0) will use for the statistical analysis. The data will be analyzed using the reliability test, frequency statistics.

Moreover, the researcher carried out the Frequency Analysis for the respondent's demographic factors of gender, race, and education background, length of services, age and professional qualification. Therefore, Pearson Correlation Analyses were used to examine the relationship between independent variables (that are compensation, training and development, job characteristic, supervisor support and promotion) and the dependent variables (that is career commitment). Further, Multiple Regression dimension of independent variables and dependent variable.

3.8.1 Mahalanobis Distance

Cohen and Cohen (1983) suggest that, as a rule of thumb, multivariate outliers = Mahalanobis Distance > Chi-Square value. Hair et al. (1998) suggest that Mahalanobis distance should not exceed the critical chi-squared value with degrees of freedom equal to number of predictors and alpha = 0.001 while Tabachnick and Fidell (2007) suggest that the Mahalanobis distance should be interpreted as χ^2 statistic with the degree of freedom equal to the number of items.

In this study, the tests conducted identified 57 cases with Mahalanobis values above 94.461. The Mahalanobis distance succeeded in identifying the multivariate outliers. The multivariate outliers identified were cases number 1, 5, 7, 9, 10, 11, 12, 13, 14, 16, 152, 172, 211, 212, 220, 221, 225, 226, 230, 231, 232, 234, 236, 238, 239, 241, 243, 244, 252,

254, 255, 257, 259, 262, 263, 264, 265, 269, 271, 275, 278, 279, 281, 282, 283, 284, 285, 286, 290, 291, 292, 293, 295, 297, 298 and 300. These outliers were deleted. Subsequent to the deletion of the 57 cases identified as outliers. This study confirmed 253 cases (respondents) were used for further analysis.

3.8.2 Normality Assessment of the Items

Normality of variables was assessed by statistical methods: skewness and kurtosis. Skewness and kurtosis values were, on average, smaller than one, and deviations from normality were very minor. Logarithm, square, and square root transformations of the data did not lessen these deviations, so data were retained in their original form. Tabachnick and Fidell (2007) stated the impact of small skewness and kurtosis deviations from zero disappears in a sample of 200 or more. Normality of the distribution of the scores of the variables is investigated. The value of skew and kurtosis is calculated to identify the distribution of scores for each item in the variables. The value of skewness can also be obtained by dividing the standard error of the skewness. 36 items is found to be not normal. These items are CC2, CC4, CC5, CC6, CC7, A1, A2, A3, A4, A5, A7, A8, A9, A11, A12, B2, B3, B4, B5, B8, B9, C4, C5, C7, C8, C9, D3, D4, D5, E1, E3, E4, E5, E6, E8, and E9.

3.8.4 Factor Analysis

The main purpose to run the factor analysis were to help the researcher categorized the suitable items for each dimension of independent variables, namely compensation, training and development, job characteristic, supervisor support and promotion in order to know sampling adequacy, Keiser-Mayer Olkin (KMO) test was used in this study. From the result of factor analysis, a reliability test for independent variables and dependent variable were conducted. The Cronbach Alpha results were used to measure the consistency and reliability of the items. The acceptable Cronbach Alpha values are 0.60 and above (Cavana, et al. 2000). Therefore, for items that had low Cronbach Alpha value (that is less than 0.59) were eliminated from further process. Rotation methods based on Maximum Varian (Varimax) were used to identify valid items for each dimension of independent variables. Through Varimax, the same items were distributed under one factor. The redundant and invalid items in the same factor were eliminated and will not be used for further analysis. The results of Factor Analysis were discussed as follows:

3.8.4.1 Retention Factors

The Factor Analysis result of retention factors were shown in Appendix 2. The rotated component matrix of 48 items with five factors was loaded at 0.50 in order to get the adequacy valid items for further analysis. The rotation of 48 items of retention factors produced five factors namely compensation (Factor 1), training and development (Factor

2), job characteristic (Factor 3), supervisor support (Factor 4), promotion (Factor 5). 15 items were eliminated (items A1, A2, A4, A9, A11, A12, B2, B5, C4, C7, C8, D3, E1, E8, and E9) from the further analysis due to the low loading factor value. The total variance is 61.65% and KMO value is 0.70. The percentage of variance for each factors were shown as follows:

Table 3.8

The percentage of variance for Factor 1, 2, 3, 4, and 5

Factors	Number of Items	Percentage (%)
Factor 1: Compensation	5	35.99
Factor 2: Training and Development	8	8.74
Factor 3: Job Characteristic	5	6.35
Factor 4: Supervisor Support	6	5.61
Factor 5: Promotion	7	4.96
Total	31	61.65

3.9 Reliability Analysis

The acceptable Cronbach Alpha values are 0.60 and above (Sekaran, 2006). Therefore, for the items that have low Cronbach Alpha values (less than 0.59) will be eliminated from further analysis process.

The Cronbach Alpha's results for each item of career commitment and retention factors were indicated in Table 3.9.

Table 3.9

The Results of Reliability Analysis

Variables	Number of Items	Cronbach Alpha
INDEPENDENT VARIABLES		
Compensation	5	0.80
Training and Development	8	0.83
Job Characteristic	5	0.79
Supervisor Support	6	0.76
Promotion	7	0.85
DEPENDENT VARIABLE		
Career Commitment	8	0.81

3.10 Conclusion

This chapter has discussed the methodology of this research, which comprised the design of study, measurement, questionnaire design, sampling design, data collection, data analysis and reliability analysis. The following chapter will discuss the findings of this study.

CHAPTER 4

FINDINGS

4.1 Introduction

This chapter presents the results of the study. The data were analyzed using frequency and inferential analysis (Pearson Correlation and Multiple-regression analysis). Frequency analysis were used to analyze the respondents demographic characteristics such as gender, race, education background, length of services, age and professional qualification, while inferential analysis were used to used to analyze the relationship between independent variable, namely compensation, training and development, job characteristic, supervisor support, promotion and the dependent variable, career commitment.

4.2 Profile of Respondents

The subjects were 219 (86.6%) male and 34 (13.4%) female respondents. 164 (64.8%) respondent are Malays, 60 (23.7%) are Chinese, 29 (11.7%) Indians. In term of educational level, 9 respondents are (3.6%) SPM/STPM, 88 (34.8%) Diploma, 56 (22.1%) Bachelor Degree, 92 (36.4%) Master Degree and 8 (3.2%) PhD. Based on length of service in high technology sector there are 4 (1.6%) involve less than 6 month, 55 (21.7%) involve 6-12 month, 149 (58.9%) involve 1 to 3 years and 45 (17.8%) involve

more than 4 years. Based on age of respondents there are 13 (5.1%) < 25 years, 61 (24.1%) 25 – 35 years, 67 (26.5.7%) 36 – 45 years, 109 (43.1%) 46 – 55 years and 3 (1.2%) > 56 years. Based on professional qualification in high technology there are 159 (62.8%) answered no and 94 (37.2%) answered yes. Table 4.1 below summarizes the profiles of respondents for more details.

Table 4.1
Respondents' demographic characteristic

Demographic Characteristic		Frequency	Percentage (%)
Gender	Male	219	86.6
	Female	34	13.4
Race	Malay	164	64.8
	Chinese	60	23.7
	Indian	29	11.5
Education Level	SPM/STPM	9	3.6
	Diploma	88	34.8
	Bachelor Degree	56	22.1
	Master Degree	92	36.4
	Phd	8	3.2
Length of Services	Less than 6 month	4	1.6
	6 – 12 month	55	21.7
	1 to 3 years	149	58.9
	More than 4 years	45	17.8
Age	< 25 years	13	5.1

Professional Qualification	25 – 35 years	61	24.1
	36 – 45 years	67	26.5
	46 – 55 years	109	43.1
	>56 years	3	1.2
	No	159	62.8
	Yes	94	37.2

4.3 Correlation Analysis

This section reports the hypothesis testing and correlation analysis results of the relationship between retention factors and career commitment. The results were shown in Table 4.2 and 4.3 respectively.

Table 4.2

Summary of Hypothesis Testing

Hypothesis Statement	Sig. Level	Finding
H1: There is relationship between compensation and career commitment	.000	Accepted
H2: There is relationship between training and development and career commitment	.000	Accepted
H3: There is relationship between job characteristic and career commitment	.887	Rejected
H4: There is relationship between supervisor support and career commitment	.042	Rejected

H5: There is relationship between promotion and career commitment	.000	Accepted
H6: There is relationship between retention factors (compensation, training and development, job characteristic, supervisor support, promotion) and career commitment	.023	Rejected

4.3.1 Retention Factors and Career Commitment

Table 4.3 showed that all five dimensions of retention factors were positively correlated with career commitment. The correlation coefficient value 0.597, 0.311, 0.433, 0.549 and 0.296. This suggests that the entire retention variable have significant relationship with career commitment.

4.3.2 Descriptive Statistics of Variable

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

Table 4.3
Descriptive statistic, scale reliability, and correlation of retention factors and career commitment

	N	Mean	Std Deviation	1	2	3	4	5	6
1. Career Commitment	253	2.3165	.19929	1					
2. Compensation	253	2.8172	.49131	.597**(.80)	1				
3. Training and Development	253	2.4591	.36785	.311**	.410**(.83)	1			
4. Job Characteristic	253	2.8533	.44208	.433**	.546**	.424**(.079)	1		
5. Supervisor Support	253	2.3633	.37665	.549**	.380**	.434**	.356**(.76)	1	
6. Promotion	253	3.1775	.52445	.296**	.413**	.620**	.476**	.481**(.85)	1

Note: Coefficient alpha reliability estimates are in parentheses on the diagonal of the correlation table

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

4.4 Multiple Regression Analysis of the Variables

This section reports the multiple regression result between compensation, training and development, job characteristic, supervisor support, promotion and career commitment.

The results were shown in Table 4.4.

4.4.1 Compensation, Training and Development, Job Characteristic, Supervisor Support, Promotion and Career Commitment

Table 4.4 illustrates the multiple regression results of compensation, training and development, job characteristic, supervisor support, promotion and career commitment.

The result revealed that only 48.5% ($r^2=0.496$) of the variance in career commitment had been significantly explained by five variables of retention factors which are compensation, training and development, job characteristic, supervisor support, and promotion. Supervisor support was found to be the most important factors in explaining career commitment beta value of 0.218, while training and development and promotion had negative value of -.005 and -.055.

Table 4.5
Multiple regressions results of retention factor on career commitment

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.330	.076		17.398	.000
Compensation	.179	.023	.441	7.799	.000
Training	-.005	.032	-.009	-.142	.887
Job Characteristic	.053	.026	.117	2.045	.042
Supervisor Support	.218	.028	.412	7.696	.000
Promotion	-.055	.024	-.144	-2.289	.023

$r^2 = 0.496$ $F = 48.54$

** $p < .000$

4.5 ANOVA Analysis

This section presents the results of ANOVA analysis between education level and career commitment.

4.5.1 Education Level and Career Commitment

One way ANOVA test was carried out. The results revealed that there was no significant difference between education level and career commitment at $p < 0.37$. There results were presented in Table 4.6

Table 4.6
The results of ANOVA analysis between education level and career commitment

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.169	4	.042	1.068	.373
Within Groups	9.839	248	.040		
Total	10.008	252			

4.6 Conclusion

This chapter presented the analysis results. The analyses were carried out using frequency, correlation, descriptive statistic, multiple regressions, and ANOVA analysis. The result revealed that there were positive relationship between compensation, training and development, job characteristic, supervisor support, promotion and career commitment. The discussion of the findings was presented in the following chapter.

CHAPTER 5

DISCUSSIONS, RECOMMENDATIONS AND CONCLUSIONS

5.1 Discussions

The purpose of this chapter is to discuss findings from the analyses performed. The discussion will be based on the objectives of the study as presented in Chapter 1, which are:

1. To determine the relationship between compensation and career commitment.
2. To find out the relationship between training and development and career commitment.
3. To examine the relationship between job characteristic and career commitment.
4. To investigate the relationship between supervisor support and career commitment.
5. To determine the relationship between promotion and career commitment.
6. To examine the relationship between retention factors (compensation, training and development, job characteristic, supervisor support and promotion) and career commitment.

5.2 The Relationship between Retention Factors and Career Commitment

As predicted, there were significant relationship between retention factors and career commitment. The correlation results (refer Table 4.3) of this study revealed positive correlation between compensation, training and development, job characteristic, supervisor support, promotion and career commitment.

5.2.1 The Relationship between Compensation and Career Commitment

According to the results (refer Table 4.3), compensation has a significant relation to career commitment. The coefficients (refer Table 4.3), indicate high technology employees are satisfied with the benefits received, the structure or administration of their compensation and the level or competitiveness of their compensation. The results (refer Table 4.3) obtained in the study are supported by Higginbotham's study (1997) on pay satisfaction, and Kochanski and Ledford's study (2001) on retaining high technology professionals.

The present study found that the majority of high technology employees receive an incentive, which provides a measure of group performance feedback. This feedback creates the perception that the organizations value their commitment. The findings confirm that high technology employees affectively want a competitive salary. The correlation result indicates similarity with the study done by Higginbotham (1997), perceptions of a "fair" salary have shown to be positively linked to career commitment

and with intention to stay. High technology employees would also like to know how their compensation is determined and how they can increase their pay. Most of the employees believe their supervisor has an influence on their raises (Schaubroeck et al., 1994)

5.2.2 The Relationship between Training and development and Career Commitment

Training and development were found to have significant positive relationship with career commitment (refer Table 4.3). Training is vital to the livelihood of high technology employees and the only way to keep employment in their careers (Tomlinson, 2002). Employees may see training as a perk and not as an essential investment in intellectual capital of the organization, thus not making them committed to the organization.

Similarly with this finding, the study that involved a manufacturing plant, internal mobility and promotion from within, company sponsored training and development, and job security were important influencers of employee commitment (Bassi and Van Buren, 1999). In addition, when the training and development needs of employees and employers are met, employees are more likely to stay in their organizations (Bassi and Van Buren, 1999; Sheridan, 1992; Wood, 1999).

5.2.3 The Relationship between Job Characteristic and Career Commitment

According to the results (refer Table 4.3), job characteristics have a significant relationship with career commitment. High technology employees' work requires them to use a number of complex or high level skills. This gives them considerable opportunity for independence, skill proficiency and freedom in how they complete their work. Career commitment creates a mindset of perceived costs, which compels the employees to stay in the organization because of sunken costs.

Furthermore, jobs characterized by varied work, an opportunity to solve challenging problems, opportunities to work with the best people, freedom, flexibility and being able to pursue interesting assignments would increase employee's retention. These feelings of increased competence and the meaningfulness of the work should develop more career commitment.

5.2.4 The Relationship between Supervisor Support and Career Commitment

The relation between supervisor support and career commitment is positive significant (refer Table 4.3). Supervisor support provides individuals with the chance to make a difference on the job, try out new skills, exercise discretion and receive feedback on their performance. This is supported by Paré et al. (2001) who demonstrated clearly that high technology employees are particularly sensitive to recognition and has been shown to have a direct effect on affective commitment. Supervisor supports make high technology

employees feel important and responsible in that they can use their innovation and skill to the advantage of the organization. This is a major intrinsic motivation for individuals.

However, the multiple regressions results (refer Table 4.4) of present study also revealed that supervisor support is the most important factors in explaining career commitment compare to other retention factor because of its highest beta value of .218.

5.2.5 The Relationship between Promotion and Career Commitment

According to the results (refer Table 4.3), promotion has a positive significant relation to career commitment. For instance, in many company there exists a well-established hierarchy in which advancement takes the form of promotions to higher level jobs, which is often considered part of the "structure" of the organization.

Promotions may be used by company to make employee more committed, particularly in companies where direct supervision of workers is difficult. A promotion may also be a reward that results in advancement within the company, but also involves greater responsibility. Promotion is based upon the company evaluation of the worker's productivity. Consequently, while workers are hired based upon well-defined personal characteristics, promotion may occur based upon qualities that are typically unobserved, such as ability, dependability, and personality. For example, Lazear and Rosen (1981) and Rosen (1986) model promotion activity within the firm in terms of a tournament.

Essentially, a promotion is considered the "prize" and the probability of winning is a function of productivity. The winner of the prize receives the salary, benefits, and prestige associated with the higher position.

5.3 Limitation of the Study

These studies have some limitation as listed below:

1. The present study concentrated only on employee in one high technology company that is Asian Composite Manufacturing (ACM) Sdn. Bhd. Therefore, the result of study could not be generalized to other company or industries as they might have different management system, policies and culture.
2. The data of this study were gathered through questionnaire only. Therefore, the feedbacks are depended on the voluntary cooperation of the participants. Further, the responses may not have been consistent and accurate measure of career commitment since respondents may not be sincere in answering the questions, by means to project a good image of the company. Therefore, the accuracy of study might be affected by the dishonesty of the respondents.
3. These studies were limited to five independent variables that were compensation, training and development, job characteristic, supervisor support and promotion. The r^2 square (refer Table 4.4) of the model suggests that independent variables

chosen for this study are not adequate to explain all retention factors. These might be other variables that are contribution factors to career commitment.

5.4 Recommendations

The aim of the present study was to assist human resources professionals and researchers to identify the effect of retention factors on high technology employees' career commitment. However, in future investigations several limitations of this study would need to be considered. First, respondents from various companies in the high technology industry could be used to obtain a more representative sample. Second, cross sectional data cannot confirm the direction of causality implied in the research model. Last, longitudinal studies are needed in order to validate the predictive dimension of the model.

Future studies could include:

- I. In this study the retention factors' effect on career commitment was tested. Career commitment is also described in literature as attitudinal commitment. The intention to stay form part of behavioral commitment. A study could investigate if the retention factors, used in this study, have more effect on the attitudinal or behavioral commitment of high technology employees.
- II. High technology employees can become more committed to their own profession, because of the respect they receive as experts and the ability to deal with difficult

technical situations. A study could investigate the difference in retention factors on their professional commitment and organizational commitment.

- III. Increasingly, individuals are unable to depend on a single organization for their entire career because of mergers, downsizing and layoffs. A longitudinal study could investigate the employee emigration from organizational commitment to career commitment.
- IV. The Internet has created opportunities with less risk and more reward. Many high technology professionals are changing careers and working for high technology start-up companies. A study could determine if these professionals have developed career commitment over time, if any.

5.5 Conclusions

In conclusion, the purposes of this study were to identify the relationship between retention factors and career commitment. Besides that, these findings present solutions to some of the issues regarding retention of valuable high technology employees. Other are encouraged to examine, empirically, this and other retention and commitment constructs.

This study has met all the six objectives as outlined in Section 1.4. The first objective is to determine the relationship between compensation and career commitment. It was indicated that compensation factors were positively correlated with career commitment. However, the second objective is to find out the relationship between training and development and career commitment. The findings revealed that training and

development were positively correlated with career commitment. The third objective is to examine the relationship between job characteristic and career commitment. Meanwhile, the fourth objective is to investigate the relationship between supervisor support and career commitment. It was found supervisor support and career commitments were positively correlated with career commitment. The findings revealed that supervisor support the most important predictor in career commitment (refer Table 4.4). The fifth objective is to determine the relationship between promotion and career commitment. Thus, the sixth objective is examining the most important retention factors related to career commitment. Multiple-regression result (refer Table 4.4) indicated that supervisor support were the most important factors in explaining career commitment.

This study has successfully attained the sixth research objectives. The study revealed that retention factors were associated with career commitment. However, these findings are only applicable to employees in the company understudy. It is beneficial for further research to examine the relationship between retention factors and career commitment in other companies and industries.

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APPENDICES

APPENDIX1:



UNIVERSITI UTARA MALAYSIA

Dear Participant,

I am a student at University Utara Malaysia conducting a study on *The Effect of Retention Factors on Career Commitment: A Study of High Technology Company*. This research is the fulfillment of completing my Master's in Human Resources Management at University Utara Malaysia.

I would appreciate if you could spare approximately 15 minutes of your time to complete this questionnaire

This questionnaire consists of three sections. Section one consists questions about your demographic profile; section two about career commitment and section three about (a) compensation, (b) training and development, (c) job characteristic, (d) supervisor support and (e) promotion

Your response will be treated with confidentiality and the response will be used for research purposes only. Thank you for your willingness to participate in this study.

Yours sincerely,

Nur Damayanti

Master of Human Resource Management

Universiti Utara Malaysia

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SECTION 1:

This section intends to get background information of the respondents'.

Tick the box which best describe you.

A. Gender

Male

Female

B. Race:

Malay

Indian

Chinese

Others (please specify): _____

C. Your education background:

SPM/STPM

Master Degree

Diploma

PhD Degree

Bachelor Degree

Others, please specify _____

D. How long have you been involve in high technology sector?

Less than 6 month

1 to 3 years

6-12 month

More than 4 years

E. Please state your age?

< 25 years

46-55 years

26-35 years

> 56 years

36-45 years

F. Do you have professional qualification in high technology?

No

Yes, please specify _____

Please tick the box which the most appropriate answer to you.

Section 2: Career Commitment

No	Questions	Strongly	Disagree	Neutral	Agree	Strongly
		disagree				Agree
1	My career is one of the most important things in my life.	1	2	3	4	5
2	I regularly consider what I could do to get ahead at work.	1	2	3	4	5
3	I am prepared to do additional chores, when this benefits my career.	1	2	3	4	5
4	The ambitions in my life mainly have to do with my career.	1	2	3	4	5
5	My career plays a central role in my life.	1	2	3	4	5
6	I think that I should have a successful career.	1	2	3	4	5
7	I think choosing new career.	1	2	3	4	5
8	This career really inspires the very best in me in the way of job performance.	1	2	3	4	5

Please tick the box which the most appropriate answer to you.

Section 3: Retention Factors

A. Compensation

No	Questions	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very Satisfied
1	My benefits package.	1	2	3	4	5
2	The number of benefits I receive.	1	2	3	4	5
3	The value of my benefits.	1	2	3	4	5
4	My most recent raise.	1	2	3	4	5
5	How my raises are determined.	1	2	3	4	5
6	The information about pay issues provided by the company.	1	2	3	4	5
7	Consistency of the company's pay policies.	1	2	3	4	5
8	How the company administers pay.	1	2	3	4	5
9	My current total salary package (base pay, benefits and incentives).	1	2	3	4	5
10	The competitiveness of my total salary package (base pay, benefits and incentives).	1	2	3	4	5
11	Influence my supervisor has on my pay.	1	2	3	4	5
12	The Company's pay structure.	1	2	3	4	5

Please tick the box which the most appropriate answer to you.

B. Training and Development

No	Questions	Strongly	Disagree	Neutral	Agree	Strongly
		disagree				Agree
1	This company is providing me with job specific training.	1	2	3	4	5
2	I can apply the training I receive, in this organization.	1	2	3	4	5
3	There are enough development opportunities for me in this company.	1	2	3	4	5
4	I have the opportunity to be involved in activities that promote my professional development.	1	2	3	4	5
5	Employees are sponsored for training programmes on the basis of carefully identified developmental needs.	1	2	3	4	5
6	Human relations competencies are adequately developed in your organization through training in human skills.	1	2	3	4	5
7	Training of workers is given adequate importance in your organization.	1	2	3	4	5
8	Employees in the organization participate in determining the training they need.	1	2	3	4	5
9	The HR department conducts briefing and debriefing sessions for employees sponsored for training.	1	2	3	4	5

Please tick the box which the most appropriate answer to you.

C. Job Characteristic

No	Questions	Strongly	Disagree	Neutral	Agree	Strongly
		disagree				Agree
1	The job requires me to use a number of complex or high level skills.	1	2	3	4	5
2	The job denies me any chance to use my personal initiative or judgment in carrying out the work.	1	2	3	4	5
3	The job is quite simple and repetitive.	1	2	3	4	5
4	The job gives me considerable opportunity for independence and freedom.	1	2	3	4	5
5	Just doing the work required by the job provides many changes for me to figure out how well I am doing.	1	2	3	4	5
6	The job requires me a lot of cooperative work with other people.	1	2	3	4	5
7	The job is arranged so that I am responsible for an entire piece of work from beginning to end.	1	2	3	4	5
8	Co-worker on this job gives me "feedback" about how well I am doing my work.	1	2	3	4	5
9	Supervisor often let me know how well they think I am performing on the job.	1	2	3	4	5
10	The job its self provides clues about whether or not I am performing well.	1	2	3	4	5

Please tick the box which the most appropriate answer to you.

D. Supervisor Support

No	Questions	Strongly		Disagree	Neutral	Agree	Strongly Agree
		disagree	disagree				
1	My supervisor looks for opportunities to raise positive employee performance, both privately and in front of others.	1	2	3	4	5	
2	I feel undervalued by my supervisor.	1	2	3	4	5	
3	The supervisor almost never gives me any "feedback" about how well I complete my work.	1	2	3	4	5	
4	My supervisor seldom recognizes an employee for work well done.	1	2	3	4	5	
5	My supervisor often lets me know how well he thinks I am performing the job.	1	2	3	4	5	
6	My supervisor rewards a good idea by implementing it.	1	2	3	4	5	
7	My supervisor cares about my well-being.	1	2	3	4	5	

Please tick the box which the most appropriate answer to you.

E. Promotion

No	Questions	Strongly		Disagree	Neutral	Agree	Strongly Agree
		disagree	1				
1	The company provides opportunities for career advancement.		1	2	3	4	5
2	I have good chance for promotion.		1	2	3	4	5
3	I have fairly good chance for promotion.		1	2	3	4	5
4	My company always gives promotion based on ability.		1	2	3	4	5
5	Opportunities for promotion are limited.		1	2	3	4	5
6	When I think of my career six months from now, I envision myself in a position with more responsibility.		1	2	3	4	5
7	If my boss or supervisor told me I was being promoted, the fact that they had so much confidence in my abilities.		1	2	3	4	5
8	I've reached the point where I feel I have learned as much as I possibly can in my present position.		1	2	3	4	5
9	An employee's promotion is important to this organization.		1	2	3	4	5
10	Promotion exercise is held regularly.		1	2	3	4	5

THANK YOU FOR YOUR COOPERATION AND ASSISTANCE

APPENDIX 2

Varimax Rotated Factor Matrix of Retention Factors

Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Compensation					
• The value of my benefits.	.578				
• Consistency of the company's pay policies.	.621				
• How my raise are determined	.552				
• How the company administers pay	.753				
• The information about pay issues provided by company	.800				
Training and Development					
• This company is providing me with job specific training.		.681			
• Employees are sponsored for training programmes on the basis of carefully identified developmental needs.		.554			
• Human relations competencies are adequately developed in your organization through training in human skills.		.546			
• Training of workers is given adequate importance in your organization.		.713			
• Employees in the organization participate in determining the training they need.		.790			
• The HR department conducts briefing and debriefing sessions for employees sponsored for training.		.565			
• My supervisor looks for opportunities to raise positive employee performance, both privately and in the front of others.		.840			
• The competitiveness of my total salary package (base pay, benefits) and incentives).		.640			

Job Characteristic

- The job requires me to use a number of complex or high level skills. .791
- The job denies me any chance to use my personal initiative or judgment in carrying out the work .644
- The job is quite simple and repetitive .577
- The job requires me a lot of cooperative work with other people. .607
- The job requires me to use a number of complex or high level skill .661

Supervisor Support

- I feel undervalued by my supervisor. .665
- My supervisor seldom recognizes an employee for work well done. .578
- My supervisor often lets me know how well he thinks I am performing the job. .561
- My supervisor cares about my well-being. .650
- My supervisor rewards a good idea by implementing it .735
- Supervisor often let me know how well they think I am performing on the job .591

Promotion

- I have good chance for promotion. .647
 - My company always gives promotion based on ability. .566
 - When I think of my career six months from now, I envision myself in a position with more responsibility. .582
 - If my boss or supervisor told me I was being promoted, the fact that they had so much confidence in my abilities. .528
 - I have fairly good chance for promotion .713
 - Opportunities for promotion are limited .693
 - Promotion exercise is held regularly .565
-

.Eigenvalues	16.91	4.11	2.98	2.64	2.33
Varians (%)	35.99	8.74	6.35	5.61	4.96
Cumulative varians (%)	35.99	44.74	51.09	56.71	61.68
Keiser-Mayer Olkin (KMO)	0.70				
