Chapter 2

Literature Review

2.1 Introduction

Job satisfaction is a very important attribute which is frequently measured by organizations. Organizational scholars have long been interested in why some people report being very satisfied with their jobs, while others express much lower levels of satisfaction. (Locke, 1976). The drive to understand and explain job satisfaction has been motivated by useful and practical reasons, as it could increase productivity, enhance organizational commitment, lower absenteeism and turnover, and ultimately, increase organizational effectiveness. Essentially, this facet is critically important among Air Defence operators as their roles and tasks involved maintaining national security that demands highly skilled manpower with correct attitude, knowledge and skill. In this respect, it requires time, effort and high cost to train and retrain an airman to the level required to perform a specific task.

Job satisfaction also affects humanitarian interests as employees deserve to be treated with respect and have their psychological and physical well-being maximized. Schnake (1991) stated that a satisfied worker usually meets or exceeds the fulfillment of their formal job requirements. While a dissatisfied worker displays a tendency for counterproductive behaviors such as withdrawal, burnout, and workplace aggression (Spector, 1997) that is undesirable in well discipline establishment in RMAF.
There are many definitions of job satisfaction. Job satisfaction is commonly defined as the extent to which employees like their work. (Agho, Mueller and Price, 1993). It is generally conceptualized as general attitude toward an object and the job (Lofquist and Dawis, 1969). Locke (1976) gives a comprehensive definition of job satisfaction as pleasurable or positive emotional state resulting from the appraisal of one’s job experience. Job satisfaction has been defined as a pleasurable emotional state resulting from the appraisal of one’s job; an affective reaction to one’s job (Cranny, Smith and Stone, 1992); and an attitude towards one’s job (Brief, 1998). Weiss (2002) has argued that job satisfaction is an attitude but points out that researchers should clearly distinguish the objects of cognitive evaluation which can affect beliefs, behaviours and certain extent of emotion. This definition suggests that employees develop attitudes towards their jobs by taking into account their beliefs, behaviors and feelings. Another distinct definition of job satisfaction is that an employee’s affective reactions to a job based on comparing actual outcomes with desired outcomes (Cranny et al, 1992). It is generally recognized as a multifaceted construct that includes employee feelings about a variety of both intrinsic and extrinsic job elements (Robbins and Judge, 2007).

2.2 Related Theory of Job Satisfaction

Job satisfaction is a complex function of a number of variables and related theories. A person may be satisfied with one or more aspects of his/her job but at the same time may be unhappy with other things related to the job. Job satisfaction is not the same as motivation, although it is clearly
linked. One of the biggest preludes to the study of job satisfaction was the Hawthorne studies. Hawthorne studies started 1924 till 1933, sought to find the effects of various conditions on workers’ productivity. The studies reflected that novel changes in work conditions temporarily increase productivity referred to as Hawthorne Effect. It was later found that this increase resulted was not from the new conditions, but from the knowledge of being observed. This finding deduced that people work for purposes other than pay, which paved the way for researchers to investigate other factors in job satisfaction.

2.2.1 Maslow’s Hierarchy of Needs

Maslow’s hierarchy of needs is one of the prominent motivation theory that laid the foundation for job satisfaction theory. This theory explains that people seek to satisfy five specific needs in life – physiological needs, safety needs, social needs, self-esteem needs, and self-actualization. In this theory it states that the lower needs must be met before the others can be achieved (Robbins and Coulter, 2007). This model served as a good basis from which early researchers could develop job satisfaction theories.

2.2.2 Herzberg’s Two Factor Theory

Herzberg developed one of the earliest theories relating to job satisfaction in the 1950s. The Two-Factor Theory, also known as Motivator–Hygiene Theory, emphasizes that there are factors in the workplace that create satisfaction referred as motivators and those which lead to dissatisfaction if they are not present or hygiene factors (Hackman, Oldham, 1976). There are four motivators in the theory: achievement, recognition,
responsibility, and advancement. There are five hygiene factors: monetary rewards, competent supervision, policy and administration, working conditions and peer relationship. The implication of the theory is that satisfaction and dissatisfaction are not opposite ends of the same scale and that job satisfaction may merely be an absence of job dissatisfaction (Robbins and Judge, 2007). Herzberg argues that it is necessary to have hygiene factors at an acceptable level simply to reach a neutral feeling about the job. The theory is simple and supports the argument that manager should take effort on improving hygiene factor from the workplace and also emphasize on motivation factor to develop the right people on the job.

### 2.2.3 Affect Theory

The Locke’s Range Affect Theory was developed in 1976, it is considered as one the most famous job satisfaction models and is used by many researchers. The main premise of this theory is that satisfaction is determined by a discrepancy between what one wants in a job and what one has in a job. This theory also states that how much one values a given facet of work moderates the satisfaction one achieves when expectations are met. Conversely, dissatisfaction occurs when expectations are not met.

### 2.2.4 Adams’ Equity Theory

Adam theory is concerned on social comparison in which, people will gauge the fairness of their work outcomes as compare to others. Perceived inequity occurs when one compares their rewards received for their work contribution which may appear less than the rewards that other people are
getting for their work. The theory states when inequity exists, people will be motivated to function less at their work place to balance up the sense of reward that they received.

2.2.5 Vroom's Expectancy Theory

This theory examines motives through the perception of what a person believes will happen based on anticipated rewards and costs. The theory uses three factors which are expectancy, instrumentality and valence that influence motivation. He argues that work motivation is determined by individual beliefs regarding effort / performance relationships and work outcomes.

In short, the expectancy theory is the perceived value of a reward for accomplishing a goal. If the person expects the reward to be good / high, then maximum effort would be given. Likewise if the expected reward is poor / low, then minimal effort would be shown. Therefore, when the reward seemed undesirable, it may lead to job dissatisfaction.

2.3 Previous Literature Review of Job Satisfaction

Tahir (2000) examined the overall job satisfaction among RMAF air traffic controller. The aim of the research was to gauge the level of job satisfaction among military air traffic controller with major objectives of analyzing the main factors that affect their job satisfaction and to determine the overall ranking of the factor, in term of importance and contribution to the level of job satisfaction. This exploratory study was based on analytical framework and model of Barnow, Mangione and Quinn (1972). The study used a non experimental and quantitative design using survey questionnaire
of 93 military air traffic controller as well as interviews with policy makers in the RMAF. The independent variables based on work environment were relationship with the job, superior-subordinate relationship, relationship with peer, economic rewards, organization climate and off-the-job rewards. The demographic characteristics were also used as independent variable. The dependent variable was overall job satisfaction.

Tahir found that majority (92.4%) of the air traffic controllers were satisfied with their job. Economic rewards and relationship with peer were significantly related to job satisfaction. In demographic expects, those controllers who are relatively younger, lower rank, holding junior appointments, less qualified and newer in service have low satisfaction level in their relationship with peers. Similarly, older controllers with higher rank, holding senior appointment with better qualification and longer job tenure have low satisfaction on economic rewards. He also found poor promotion prospect has contributed significantly to lower satisfaction among the air traffic controllers. Based on the results of the study, he suggested that more sports and social activities could be conducted to improve the peer relationship among the junior controller. As for the senior controllers, he suggested that RMAF should review the promotion system to enhance job satisfaction among them.

Another study by Ellickson (2002) examined the determinants of job satisfaction of municipal government of employees in USA. The aim of the research was to enhance the knowledge of the determinants of job satisfaction among municipal government employees as this organization has long been neglected in the job satisfaction literature. This exploratory study was based on environmental factors and personal characteristics associated
with job satisfaction. In the environment factors they included 11 variables: equipment and resources, physical work space, safe work environment, training, workload, departmental esprit de corps, pay, benefits, promotional opportunities, performance appraisal, and supervision. Whereby, in the personality’s characteristics the demographic information regarding employee gender, age, and job level to reflect whether respondent is supervisory or non-supervisory position.

The study used a non experimental and quantitative design survey questionnaire. The questionnaire was designed to assess employee perceptions about 11 different aspects of the workplace and 3 personal attributes on overall job satisfaction. The research participants were asked to respond to survey questions on workplace using a 5 point Likert-type scale that ranged from 1 = "strongly agree" to 5 = "strongly disagree" or 1 = "very satisfied" to 5 = "very dissatisfied," The measure of overall job satisfaction was using single item construct on the following question "What is your level of overall satisfaction with your job?" The data were collected from 1,227 full-time municipal employees representing 18 departments and serving an area population of approximately 200,000 in the mid-west region of the United States, The survey was conducted in 1999, and the overall response rate was 91 percent.

The reliability of the questionnaire was assessed by Cronbach's alpha, which yielded a reliability coefficient of .81. The analysis revealed that 9 out of the 11 environmental variables tested were statistically significant factors of job satisfaction. The factors on adequate physical work space and a safe work environment did not reach a level of statistical significance. The departmental
pride clearly emerged as the most powerful determinant of variation in overall job satisfaction among municipal employees. Aside from departmental pride, promotional opportunities, pay benefit were among the model's most important predictors of job satisfaction. The strength of these three factors lends strong support to the importance of extrinsic rewards in the development of municipal employee job satisfaction. In contrast, only one of three personal attributes tested emerged as a significant predictor of job satisfaction, although gender's impact was successfully stated in the null.

Price (2002) also looked at the job satisfaction of registered nurses and the factors that led to satisfaction or dissatisfaction in the acute adult hospital in USA. Price's study had a quantitative, descriptive design and was based on the theoretical framework of Maslow’s need hierarchy theory. He used a systematic sampling design to select 175 of the 351 nurses in the same field across the country. The questionnaire used in Price's (2002) study to measure nurse satisfaction was the Mueller McCloskey Nurses Satisfaction Scale (MMSS). It is a Likert scale ranging from 1 (very dissatisfied) to 5 (very satisfied) and it has been found to be both valid and reliable with a correlation coefficient of 0.89. The MMSS had eight subscales that included satisfaction with extrinsic rewards, scheduling, balance of family and work, co-workers, interaction opportunities, professional opportunities, praise and recognition, and controls and responsibility. The results of the study showed that 58% of the participants were generally satisfied with their job and 42% were either dissatisfied or undecided. According to the mean scores of the eight subscales on the MMSS, co-workers (3.8) and extrinsic rewards (3.5) were rated the highest in relation to satisfaction and professional opportunities (2.6)
and control and responsibility (2.7) were rated the lowest. It was also found that the most satisfied nurses were working part-time, between 51 and 60 years old, and had been working in post for 7-10 years. The most dissatisfied nurses were working full-time, between 31 and 40 years old, and had been working in post for 3-4 years.

The results of this study emphasized the relationships between co-workers and employment benefits as dissatisfiers along with low levels of perceived autonomy and professional opportunities as satisfiers. Most other factors of dissatisfaction were related to the amount of encouragement, feedback, and recognition that is received from administration and the nurse’s opportunities to participate in decision-making. All of these aspects of dissatisfaction could be changed at the administrative and managerial levels to increase the nurses’ satisfaction.

Castillo and Cano (2004) examined the factors explaining job satisfaction among faculty at the College of Food, Agricultural, and Environmental Sciences at The Ohio State University, USA. The purpose of the study was to describe the amount of variance in faculty member’s overall level of job satisfaction explained by Herzberg, Mausner, Snyderman (1959) job motivator and hygiene factors. Additionally, the study sought to investigate the suitability of a one-item versus a multi-item measure of overall job satisfaction. The independent variables were salary, supervision, policy and administration, peer relationship, work conditions of hygiene factor and work itself, advancement, achievement, recognition and responsibility of motivation factor. The dependent variable was overall job satisfaction.
The study used a quantitative survey of 172 members of faculty. The questionnaire consisted of three parts: the Job Satisfaction Index, Wood (1973) Faculty Satisfaction / Dissatisfaction Scale, and demographic characteristics. Part I of the instrument contained the Job Satisfaction Index. The Job Satisfaction Index considered all facets of the job when measuring job satisfaction, utilizing an 18-item, five-point Likert type scale, with responses ranging from 1 (strongly disagree) to 5 (strongly agree). Part II of the questionnaire consisted of Wood (1973) Faculty Satisfaction/Dissatisfaction Scale, as modified by the researcher, to measure the Herzberg et al, motivator-hygiene factors. Wood’s instrument consisted of a 79-item six-point Likert type scale with responses varying from 1 (very dissatisfied) to 6 (very satisfied). Part II also contained a one-item overall job satisfaction measure which read, “Considering all aspects of my job, my overall level of job satisfaction is...” Part III of the questionnaire consisted of questions pertaining to the demographic characteristics.

The finding reviewed that the faculty members were generally satisfied with their jobs. However, female faculty members were less satisfied than male faculty members. The factor “work itself” was the most motivating aspect for faculty. The least motivating aspect was “working conditions.” The demographic characteristics were negligibly related to overall job satisfaction. All of the job motivator and hygiene factors were moderately or substantially related to overall job satisfaction. The factors “recognition,” “supervision,” and “relationships” explained the variability among faculty members’ overall level of job satisfaction. The one-item measure of overall job satisfaction was not different from a multi-item measure of overall job satisfaction.
The findings imply that faculty members were most satisfied with the content of their job and least satisfied with the context in which their job was performed. The individual department administrators should conduct a job analysis for each position and seek innovative ways to enhance the work faculty members actually perform. Conversely, the environment in which faculty member’s work is performed should be reviewed to improve the context.

A different study was done by Scott, Swortzel and Taylor (2005) to determine how demographic factors were related to the level of job satisfaction of Extension agents in Mississippi. They believed that demographic variables should be considered to thoroughly understand the possible factors that lead to job satisfaction and dissatisfaction. Their study follow a descriptive correlational design based on Hackman and Oldham (1980) theory that describes a job characteristic which is an attribute of a job that creates conditions for high work motivation, satisfaction and performance. The study used questionnaire survey of a modified version of the Job Diagnostic Survey (JDI) developed by Hackman and Oldham (1980), consists of two sections of job satisfaction construct, namely personal satisfaction and context satisfaction. The questions asked in the personal satisfaction construct relates to internal work motivation, growth satisfaction, and general satisfaction. Whereby, job security, pay, co-worker relations and supervision were used to measure context satisfaction. The sub scales of demographic characteristics used in the study were gender, age, race, marital status, education level, previous position and current position held by Extension agents.
The questionnaires were sent to 195 Extension agents. Based on 143 usable responses, significant relationships existed between the job satisfaction constructs and the demographic factors of gender and race. Low relationships were observed between gender and the job satisfaction constructs of growth, job security and satisfaction with pay. Females rated all three of these constructs higher than males, indicating a higher level of satisfaction with personal learning and growth opportunities at work, job security, and compensation. The study also found that area agency has lower job satisfaction rate among co-workers relationship compared to 4-H agents in consideration of the Extension agents’ current position.

Khodabakhsh and Kolivand (2007) believed that stress induces impairment of performance of which this is a relatively common issue in pilots of military aviation. Their study was aimed at gathering preliminary data on the relationship between stress and job satisfaction among military pilots. The primary goal of this study is to explore the stressors that affect pilots in their field of practice and to determine the extent military pilots are suffering from job satisfaction. Their study was cross-sectional in design and used survey methodology. The survey was offered to 89 military pilots. The independent variables were life stress, organizational stress, flight environmental stress and task-based stress. The pilots’ flight hours used to indicate pilot’s experience were also used as independent variable. The dependent variable was overall job satisfaction. All respondents completed a questionnaire with 32-item on Aviation Stress and short form of Minnesota Job Satisfaction Questionnaire (MSQ). The results indicated that 33.7 percent of pilots had mild stress, 48.3 percent of pilots exhibited moderate stress and only 13.5
percent of pilots indicated high stress. Of the four groups of stressors, the life stress had maximum rate of incidence with the mean of 6.45 and Standard Deviation (SD) of ± 2.3, the organizational stress with the mean of 5.05 and SD of ±2.1, the flight environmental stress with the mean of 4.03 ± and SD of 1.9 and finally, the task-based stress had minimum rate of incidence with the mean of 3.91 and SD of ± 2.1.

The correlation (r) between job satisfactions and life stress was -.53, with organizational stress -.38, with flight environmental stress -.25, with task-based stressors -.23 and finally correlation between job satisfactions with flying hours was -.22. The finding also reviewed that when military pilots have the least flights, with no schedule and lots of idle time, these factors can also increase their stress level. The results of the study suggest that it is essential to provide military pilots with some training, evaluating and other psychological services, especially life skills and organizational skills. In addition, filling their schedules with useful programs such as flight with civilian airplanes, educational and research activities, favorite executive activities, sports and entertainment can decrease their stress, increase their job satisfaction and decrease their occupational weariness.

2.4 Research Framework and Development of Research Hypothesis

Based on the theories and literature review described above, it is identified that environmental factors and personal characteristics are the general antecedent variables associated with job satisfaction. Environmental antecedents of job satisfaction pertaining to factors associated with the work itself or work environment. Personal characteristics are personal factors
focused on individual attributes and characteristics. There are other contemporary studies based on the person-environment fit paradigm model. This approach states that when a person's work environment fulfills his or hers needs, values, or personal characteristics, the greater the degree of job satisfaction (Mottaz, 1985). Job fulfillments, job characteristics, met expectancies; value attainment, equity, organizational justice, and personal traits are the factors frequently being studied on job satisfaction in theoretical application of the person–environment fit model. (Ellickson, 2002). These factors are indirectly related to this study.

Since the previous efforts to understand and explain job satisfaction have resulted in the identification of a number of important environmental antecedents that is closely link to Herzberg’s hygiene factor, it could be applied to air defence operators’ environment. The theoretical framework used for this study on air defence operators’ job satisfaction is based on Herzberg’s two factors theory using environmental antecedents. The independent variables are motivation and hygiene factors, and the dependent variable is job satisfaction. Personal characteristics that are related in RMAF personnel will also be used as independent variables to study job satisfaction. The theoretical framework is as shown in figure 2.4.
2.4.1 Hygiene Factor

Hygiene factors also termed as dissatisfiers, are directly related to job dissatisfaction. These factors include salary, supervisor-subordinate relationship, peer relationship, company policy and administration and working conditions. Arguably, hygiene issues, according to Herzberg, cannot motivate employees but can minimize dissatisfaction, if handled properly. In other words, they are only dissatisfied if the issues are absent or mishandled. Although hygiene issues are not the source of satisfaction, these issues must
be dealt effectively to create an environment in which airmen or AD operators satisfaction and motivation are even possible.

a. **Salary and Job Satisfaction.** Salary is extrinsic rewards that can take the form of basic pay, allowances, fringe benefit and other forms of incentive that have monetary value. Although, available research strongly suggests that salary has a positive relationship and impact on job satisfaction (Liou, Sylvia, and Brunk, 1990) but unfortunately this issue has been frequently overlooked (Barber, Dunham, and Formisano, 1992) especially in Malaysia public sector as well as in the military. Salary is an important factor to Air Defence (AD) rank and file operators as their pay scheme is relative low and their allowances much depend on their pay scheme and promotion.

Extrinsic rewards have sometimes been characterized as "investments" that organizations use to help strengthen ties between themselves and their employees. (Behn, 1995). According to Romzek, 1999 "investments" in the public sector usually focus on opportunities for career development, performance bonuses and salary and various benefits such as living quarter, free medical benefit. The similar approach is adopted in RMAF.

There are several theories relating pay to job performance and satisfaction. Jones and James (1979) explained in McClelland's Need theory that pay is the need and necessity for survival and well-being. The basic premise of need theory is that people are motivated to perform best at work when basic needs are satisfactory. They further described that outcomes such as pay should be distributed in portion to inputs or performance levels in Adam's equity theory as explained earlier. Based on the theories explained
above, the question has been raised on whether the airman is satisfied or not. As the air defence officers are getting additional allowances like critical and controlling allowance for directly controlling and directing fighter aircraft whereas the other ranks are not getting the similar allowances as they are not controlling the fighter aircraft.

Jones et al (1979) also used Vroom’s expectancy theory in explaining pay, job performance and satisfaction relationship. They posit that motivation will be high when workers believe that high level of effort will lead to high performance and high performance will lead to the desired outcome. This facet is most likely to be adopted by the airman since the pay is comparatively not high.

There are various interpretations of monetary rewards or cash in kind in relation to job satisfaction. According to Opsahi and Dunette (1996), money is generally a conditioned reinforce factor because of its repeated pairings with primary reinforce factors. Robbins & Coulter (2007) stated that such a generalized reinforce factor should be effective because some deprivations will usually exist for which the conditioned reinforce factor is appropriate. In addition, the act of receiving money serves to drive-increasing function when money is easily obtainable. It also acts as an anxiety reducer, reducing the anxiety when money is available and increasing anxiety, when it is absent.

In another study by Bailey (2001), revealed that the amount of salary offered is the most important factors to attract young people to join the Army in America. If the pay package were attractive then the young soldiers will have a greater influence on motivation toward job satisfaction. He argued that if the trend toward greater affluence society continued, American youth would
have little patience with any form of economic hardship and an increased pay package would be mandatory to attraction and retention of work force in the Army. Based on the review of literature in this section, the hypothesis is proposed:

**Hypothesis 1**: There is a positive relationship between salary and overall job satisfaction.

**b. Superior-Subordinate Relationship and Job Satisfaction.**

Successful air defence operation is largely a team contribution. The most immediate and potent form of control in such a demanding operation environment is direct supervision by appointed superior who actively monitor and observe their subordinate perform their function. The supervisor is required to teach subordinate the appropriate procedure and intervene to take corrective action as need arise. In such a work environment, it requires a cordial and mutual understanding relationship between superior and subordinate. This is consistent with Hopkins (1983) finding, the nature of supervision in the workplace is defined by the relationship between the individual employee and the immediate supervisor. The behavior of the superior is found to have an influence upon the subordinate and can be a source of motivation or otherwise. The superior behavior is also a major determinant of satisfaction (Robbins and Judge, 2007). Studies find that employee satisfaction increased when immediate supervisor understands and friendly, offers praise for good performance, listen to employee’s opinion and shows a personal interest in employee.
Superior-subordinate communication is an important influence on job satisfaction in the workplace. The way in which subordinate’s perceive a supervisor’s behavior can positively or negatively influence job satisfaction. Body language or behavior such as facial expression, vocal expression, eye contact, body movement and gesture is crucial to the superior-subordinate relationship (Teven, 2007). Nonverbal messages play a central role in interpersonal interactions with respect to impression formation, deception, attraction, social influence, and emotional expression (Burgoon, Buller, & Woodall, 1996). Teven (2007) explained that the manner in which supervisors communicate with their subordinates may be more important than the verbal content. Individuals who dislike and think negatively about their supervisor are unwilling to communicate or have motivation to work. Likewise, individuals who like and think positively of their supervisor are more likely to communicate and are satisfied with their job and work environment.

Numerous studies have shown that positive relationships between supervisors and subordinates contribute to higher levels of job satisfaction as stated by Kahn (1972). Ting (1997) also reported that government employees who enjoyed a supportive relationship with their immediate supervisor’s experienced a higher level of job satisfaction than those who did not. Staw and Ross (1985) examined the relationship between supervisor attitude and subordinate satisfactions. They concluded that the factors most conducive to employee motivation and job satisfaction are: supportive supervisors who exhibit high levels of competence, trustworthiness and fairness, which is similar to the credibility scheme created by McCroskey and Teven (1999). In addition, Teven (2007) found that a sociable supervisor has the ability to
enhance subordinate's satisfaction and perception of her or his credibility. The above explanation is much applicable and related to the air defense unit operational environment. Thus in this study, it is proposed that

**Hypothesis 2:** There is a positive relationship between superior-subordinate relationship and overall job satisfaction.

c. **Relationship with Peers and Job Satisfaction.** In the air defence organization, officers and other ranks always work as a team or as a group while carrying out their duties. As such, the work group establishes norms such as group behavior, level of output and pattern of work. In such an environment, the group will develop esprit de corps and a certain amount of job satisfaction among them. Inevitable the work group serves as a source of job satisfaction in terms of social relationship, interactions and sharing of things in common to achieve the organization set goals. In this context, It is observed that if an airman is being alienated from the group, he will feel helplessness and restless. Subsequently, it will likely affect the job satisfaction.

In the earlier study by Shaw (1964), it was reported there was a positive impact of job satisfaction and good relationship within a small group of employees. Lucas and Diener (2001) reported how participants with communication ties had a higher job satisfaction than those who did not have any ties. More recent research reports similar findings showed that close personal ties like friendship relationships are particularly important on job satisfaction (Bettencourt and Sheldon, 2001). They argued that close friendship ties affect satisfaction in two ways. First, such ties are an important resource for psychosocial support; they are likely to enhance enjoyment and
to buffer work problems. Second, they are instrumentally important for successful negotiations and enable access to crucial resources and information. In sum, empirical research provides evidence for the claim that popularity and influence are robust predictors of well-being and that the number of peer nominations received is related to self-esteem and reduction of peer role strain (Diener, Oishi and Lucas, 2003).

Katz (1964) states that simulation, approval and the support derived from interacting with colleagues. These are critical factors of motivation that has direct influence on job satisfaction. Satisfaction from work groups may also increase if members have similar attitudes and values.

In another research by Watson (1988), it supported a positive and substantial association between social activity and positive affect. He found weaker evidence for a relationship between social activity and negative affect. Early research on social interactions and affective experiences has either not distinguished between various types of social interaction (Watson, 1988) or has focused on mostly pleasant social interactions (Tschan, Semmer, & Inversin, 2004). More recently, however, scholars have recognized the fact that various types of social interactions differ in their degree of agreeable nature (Lucas & Diener, 2001).

Global job satisfaction evaluations are influenced by peer relationship at work because “how people get along with their colleagues, supervisors, or subordinates is part of the overall perception of their work situation” (Tschan et al, 2004, p. 145). According to Ting, (1997) employees who experience rewarding interactions more often should be more satisfied with their jobs.
Indeed, there is some evidence that participating in more social interactions at work leads to higher general job satisfaction.

Based on the review of literature in this section, it is proposed that:

**Hypothesis 3**: There is a positive relationship between relationship with peers and overall job satisfaction.

d. **Work Conditions and Job Satisfaction**. In this study, work conditions not only refer to physical working place but also include the availability of tools, equipment, resources to conduct the assigned job and safety aspect of work place. The environment in which air defence operators work has a tremendous effect on their level of pride for themselves and for the work they are doing. As mentioned earlier, there are a total of 8 air defence units in RMAF. Each unit has different roles and functions, hence the work conditions and facilities differ from one unit to another, for example 310 Sqn and 320 Sqn are equipped with air defence simulator that facilitate continuation training to maintain and upgrade the skill. It is obvious that the air defence operators in these units have sufficient job training than other unit personnel. Research by Peters, O'Connor, and Eulberg (1985) indicates that organizational obstacles or constraints such as inadequate tools and equipment, insufficient training, cramped workspaces and unsafe work environments may be important predictor variables of employee attitudes, motivation, and performance. While most studies in this area have focused primarily on the adverse effect of constraints on organizational performance, a few have examined the influence of organizational constraints on employee job satisfaction. Brown and Mitchell (1993) in their study of bank employees
documented numerous significant negative links between various work conditions and employee job satisfaction. Thus in this study, the following hypotheses are proposed:

**Hypothesis 4a:** There is a positive relationship between operator’s perceptions of adequate work equipment and resources and overall job satisfaction.

**Hypothesis 4b:** There is a positive relationship between operator’s perceptions of a safe work environment and overall job satisfaction.

**Hypothesis 4c:** There is a positive relationship between operator’s perceptions of sufficient physical work space and overall job satisfaction.

### 2.4.2 Motivation Factor

Motivation factors are commonly referred to motivators or satifiers and directly related to job satisfaction. Motivation factors are those aspects of the job that make people want to perform, and determine the degree of job satisfaction (McKenna, 2000). Herzberg (1959) suggested emphasizing factors associated with the work itself or outcomes directly derived from it, such as promotional opportunities, opportunities for personal growth, recognition, responsibility and achievement can greatly enhance job satisfaction. These are the characteristics that cannot be seen, it can only be inferred and people find intrinsically rewarding.

Padilla-Velez (1993, pp. 20-21) and Bowen (1980, pp. 13-14) explained the following terms for motivation factors.
1. **Recognition** - Acts of notice, praise, or blame supplied by one or more superior, peer, colleague, management person, client, and/or the general public.

2. **Achievement** - Accomplishment of endeavors including instances wherein failures were incurred. Similarly, instances were included wherein either success or failures were incurred.

3. **Possibility of Growth** - Whether a change in status was possible, irrespective of the fact that the change could be upward or downward in status.

4. **Advancement** - Designated an actual change in job status.

5. **Responsibility** - Satisfaction derived from being given control of personal work or the work of others and/or new job responsibilities.

Porter and Steers (1973) argued that the extent of employee job satisfaction reflected the cumulative level of meeting worker expectations and their preferential value. That is, employees expect their job to provide a mix of features such autonomy, responsibility, achievements and promotion that generally related to pay and status. The range and importance of these preferences vary across individuals, but when the expectation are not met and becomes sufficiently large there is less job satisfaction and eventually might develop into withdrawal behavior (Pearson, 1995).

### a. Work Itself and Job Satisfaction

Air Defence personnel are the vanguards who are responsible to maintain the sovereignty and integrity of Malaysian airspace. Each individual has it own duties and responsibility to accomplish the formidable function. Failure or negligent of an individual may
cause the failure of the whole air defence system that could be detrimental to national safety and security. It is imperative that each individual is motivated to believe that the work they are doing is important and that their tasks are meaningful. As such, each air defence operator must undergo various basic and advance training courses and assessment before being certified as qualified operator and employed on appropriate appointments. Once they are operational, they are constantly being evaluated by either unit examiner or external examiner to ensure they remain competent in their job. In addition, each individual are given set goal and job description. They are assessed by their superior through annual performance appraisal.

Lambert (1989) has found that jobs that provided employees with the opportunity to do a variety of tasks which were personally meaningful promote job satisfaction, job involvement and thereby intrinsic motivation. Other researchers (e.g. MacDonald, 1996; Castillo et al, 2004) argue in favor of the control of job satisfaction by factors intrinsic to the workers. Their arguments are based on the idea that workers deliberately decide to find satisfaction in their jobs and perceive them as worthwhile and has ownership of the job. Katz (1964) also notes that job satisfaction for an employee comes from the job itself and accrues from the expression of his ability to exercise his judgment. It can also be implied that job satisfaction could be derived from the intrinsic rewards in the job and stems from the performance of the job itself. Lawler (1973) posits that job characteristic is the critical determinant of whether employees believe that goal performance on the job leads to feelings of accomplishment, growth, self-esteem and being recognized.
Hackman and Oldham (1980) also defined the four personal and work outcomes of the job characteristics theory. These outcomes include internal work motivation, growth satisfaction, general satisfaction, and work effectiveness. Internal work motivation indicates an employee’s satisfaction when performing well on the job because it is rewarding and satisfying to do so, thus serving as an incentive for continuing to do well. Growth satisfaction indicates employee satisfaction when employees have enriched opportunities for personal learning and growth at work. General satisfaction indicates employee satisfaction when employees indicate how satisfied they are with their jobs and how frequently they think of quitting their jobs. These three affective outcomes combine to form the personal satisfaction constructs. Finally, work effectiveness indicates an employee’s satisfaction in both the quality and quantity of goods or services produced (Hackman & Oldham, 1980, Scott et al., 2005). Therefore the following hypotheses are proposed:

**Hypothesis 5a:** There is a positive relationship between operator’s perceptions on the importance of work itself and overall job satisfaction.

**Hypothesis 5b:** There is a positive relationship between operator’s perceptions of the sense of achievement and overall job satisfaction.

**Hypothesis 5c:** There is a positive relationship between operator’s perceptions of being recognized for a good job achieved and overall job satisfaction.

b. **Promotion Opportunities and Job Satisfaction.** The air defence unit practices a structured promotion system designed to assist both officers and individual soldiers. The system enables the best to reach position of most
important and highest responsibility. This system assures qualified and capable personnel advancement in conjunction with the duration of service and vacancy available. Due to the pyramid hierarchy structure, the chances of promotion to higher appointment will not be equal to all. Inevitably, it may lead to career dissatisfaction among some that will affect morale of the individual.

Price and Mueller (1981) in their study found that promotion opportunities were strongly correlated to job satisfaction. Ellickson, (2002) and Castillo et al (2004) found that individual in an organization who perceived growth opportunities were more satisfied with their job overall. It is proposed that:

**Hypothesis 5d:** There is a positive relationship between operators’ perceptions of promotion opportunities and overall job satisfaction.

**Hypothesis 5e:** There is a positive relationship between operators’ perceptions of their responsibility and overall job satisfaction.

### 2.4.3 Personal Characteristics and Job satisfaction

Personal characteristics are personal factors focus on individual attributes and characteristics. It is the most commonly investigated source of variation in job satisfaction pertains to the demographic characteristics of the employees themselves. Many researchers also believe that individual attributes serve to moderate the relationship between environmental factors and job satisfaction, and thus should be included as control variables in any model of job satisfaction.
When considering job satisfaction, demographic variables should be considered to thoroughly understand the possible factors that lead to job satisfaction and dissatisfaction.

a. **Age.** Herzberg, Mausner, Peterson, and Capwell (1957) identified several characteristics of satisfied/dissatisfied workers. They indicated that morale is high when people first start their jobs. Morale decreases during the next few years and remains at a relatively low level until workers are in their late twenties or early thirties. At this time, job satisfaction levels begin to rise and continue to rise through the remainder of the workers’ careers. The same trend is found in regard to a worker’s length of service. Workers begin with high morale, which drops during the first year and remains low for a number of years. Then as length of service increases, job satisfaction levels tend to rise.

The above theory could be linked to employee age in relation to job satisfaction. Brush, Mock, and Pooyan (1987) argue that increases in employee age are likely to be associated with enhanced positions of organizational authority, prestige, status, and confidence, which are potential contributors to job satisfaction. Others believe that older employees are more likely than younger employees to have established a better person-environment fit, resulting in higher job satisfaction. However, taken as a whole, previous research is inconsistent regarding the effects of age on job satisfaction. While numerous studies have reported a positive relationship between age and job satisfaction, others have identified no relationship, or a significant negative relationship (Ellickson, 2002). Even though research
results regarding the relationship between employee age and job satisfaction are inconsistent, this study has proposed that:

**Hypothesis 6a:** There is a positive relationship between air defence operator's age and overall job satisfaction.

b. **Gender.** Gender is another common demographic variable frequently used to study job satisfaction. However, there are no simple conclusions about the differences between males and females and their job satisfaction levels. In the earlier study, Herzberg et al. (1957) indicate that males are more satisfied with their jobs, the same finding also reported by Smith, Kendall, and Hulin (1969) and Castillo et al. (2004). While studies by Clark (1997) indicated that females are more satisfied than males in their jobs. More recent research is consistent in reporting no effect of gender on overall job satisfaction (Ellickson, 2002; Scott et al., 2005). In fact, Tait, Padgett, and Baldwin (1989), using meta-analysis techniques, trace the absence of gender differences in job satisfaction to the mid-1970s where it is noted that men and women began to approach parity in organizational positions held in administrative and professional field. Historically, the public sector in general and in military organizations in particular was indifferent to the needs of female employees because the military is dominated by male employees. Given that short history of employment of women in the military, it seems reasonable to assume that as the result that the female employees might report a lower level of job satisfaction than their male counterparts as it is generally the males who traditionally set the tone for the organizational
culture or work values. Based on the literature review, it is proposed in this study that:

**Hypothesis 6b:** There is no relationship between air defence operator’s gender and overall job satisfaction.

c. **Academic Qualification.** The basic entry requirement to join air defence for officers is “Sijil Pelajaran Malaysia (SPM)” certificate with a minimum result of six credits and above. Whereby, the other ranks need only obtained a pass in the “Sijil Rendah Pelajaran (SRP)” certificate. According to Staff Officer 2, Human Resource Department, RMAF, 71% of other ranks in the air defence unit has the qualification of SPM, some of them even have very good SPM and a small portion of them has diploma qualification. Since the existing pay scheme depends on the rank structure, those with higher academic qualification are getting the same basic pay like the rest as they are doing the same tasks and responsibilities according to the rank structure. Qualification is another common identified variable in studying the demographic characteristic even though the results shown were inconsistent. Job satisfaction researchers found that employees with higher academic qualification will tend to experience greater job satisfaction compare to those who has lower academic qualification (Jayaratne, 1993; Burk, 1985). However, Clark and Oswald (1996) in their study found out those employees with higher qualification experienced low job satisfaction. It is proposed that

**Hypothesis 6c:** There is a positive relationship between air defence operator’s academic qualification and overall job satisfaction.
d. **Rank.** In the air defence organization, the rank structure is associated to level of job and responsibilities. Research studies also found that job level in an organization have a significant relationship to job satisfaction. Based on previous research, it appears that rank or job level is positively correlated with job satisfaction. (Cranny, Smith, and Stone, 1992.) Higher level positions are usually associated with higher pay, autonomy, responsibility, promotion prospects, and better overall working conditions. Recently, a meta-analysis examining the relationship between rank or job level and job satisfaction using data drawn from 35 independent samples and over 18,000 respondents concluded that as job level increased, so did job satisfaction. Ronen (1978) noted that job satisfaction will increase with rank. Near, Rice and Hunt (1978) examined that relationship between age, occupational level and overall satisfaction, reporting that the strongest predictors of job satisfaction among 18 variables were occupational level; rank and age. Miles, Patrick and King (1996) found job level to be a significant predictor of employee’s level of job satisfaction. Allen, John and Bell (1980) concurred with that study, which indicated that among the soldiers in the United States of America Army, salary and rank does influence the job satisfaction and if those factors were not favorable, and then they will decide to leave the service. The evidence from the literature seems to suggest that rank is a reliable predictor of job satisfaction with employees at higher rank being generally more satisfied with their jobs compared with employees at lower rank structures. It is proposed that

**Hypothesis 6d:** There is a positive relationship air defence operator’s rank and overall job satisfaction.
2.5 Summary

This chapter commences with brief description of job satisfaction and related theories of job satisfaction. It includes several literature reviews on job satisfaction. Although some of these articles examined different topics, common themes of environmental factors were identified; such as the importance of peer relationship and working conditions related to air defence operators’ job satisfaction. These common themes are closely link to Herzberg’s hygiene factor. Therefore, the theoretical framework adopted for this study is based on Herzberg’s two factors theory and personal characteristics. The independent variables were salary, subordinate-superior relationship, peer relationship, policy and administration, work conditions of hygiene factor and work itself, promotion opportunities, achievement, recognition and responsibility of motivation factor. The dependent variable was job satisfaction. In addition several hypotheses were developed to test the relationship between these factors and overall job satisfaction.