

CHAPTER 1

INTRODUCTION

Background to Research Problem

National Service is crucial to the defense of Singapore in the face of external threat. In Singapore, all males who are citizens or permanent residents are called up to serve National Service between the ages of 18 and 23 for a period of two to two and a half years. National Service is likely to pose as a major stressful life event of most Singaporean males, particularly during basic military training. This is the time when the new soldier is immersed into a totally new institutional environment, with new demands for them to train to take arms and defend the Nation.

Factors Affecting Coping in the Military

Military research on the factors related to suicide attempt included precipitating external circumstances, inability to adapt to training, and homesickness associated with medical problems (Wasileski and Kelly, 1982). Personality factors have also shown to be significant in failure to adapt to military training (Butters, Retzlaff and Gibertini, 1986; Carbone, Cigrang, Todd and Fiedler, 1999; Clemons, 1996;

McCraw and Bearden, 1990; and Rudd and Orman, 1996). Chapter two reviews the literature on coping with military training.

According to Nardi, Lichtenberg and Kaplan, (1994), conscription may pose significant adjustment difficulties for the soldier. Anxiety levels and poor coping strategies may make adjustment more difficult. Nardi, Lichtenberg and Kaplan stated that adjustment problems arise due to several factors. Firstly, the new recruit must forgo his sense of individuality at a time where developmentally, there is a strong need for autonomy and personal identity. Secondly, the recruit must also adjust to rigorous physical training in a short span of time. Hence there is a demand to adhere to inflexible schedules and to follow orders unconditionally. Thirdly, the expectation to be aggressive in combat training may arouse fear of losing control of these impulses or harming others or of oneself being harmed. There is also the need to adjust to leaving the comfort and security of home to live with fellow soldiers who come from different cultural and ethnic backgrounds. Finally there is the fear of not meeting up to expectations of family, friends, commanders and society for the soldier to be able to defend the country.

The Present Status of Basic Military Training in Singapore

In Singapore, it has been observed that some recruits appear to be more distressed than others are during the stress of Basic Military Training. Pre-enlistment screening of vulnerable National Service registrants is carried out routinely in the

Singapore Armed Forces. This involves health checks for all registrants as well as psychiatric screening for individuals with past history of psychiatric problems. Despite this initial screening, some recruits still report distress, to the point that they have to be referred to mental health agencies within the Singapore Armed Forces. Approximately 10% of referrals to the Psychological Care Centre of the Singapore Armed Forces are National Service recruits with adjustment disorders.

In more recent years, there is greater commitment and determination to give recruits the best that could be provided. Singapore's Minister of Defence, Dr Tony Tan, speaking at the opening ceremony of the new Singapore Armed Forces Basic Military Training Centre on 17 August, 1999, commented that National Service had changed over 32 years. He commented that "the Singapore Armed Forces spares no effort in giving our recruits the facilities they must have in order to recover from their training and benefit from their exercises." This would help bring training and welfare toward excellence in the new millennium (Mok, 1999, p.5).

How do mental health agencies within the Singapore Armed Forces move in line with this new direction for the year 2000? This issue of adjustment can be addressed at two levels, namely, prevention and correction. At the preventive level, research on the factors, which may affect coping, can serve to fine-tune the pre-screening procedures such that they include the screening of psychologically vulnerable individuals before they enter basic military training. Currently, only

those who have known psychiatric problems requiring intervention are screened. The weakness of such a screening is that it does not include getting a psychological profile of every registrant. Furthermore, although there is a preparatory training phase for physically weak recruits, there is no equivalent preparatory training programme to prepared psychologically vulnerable individuals for military training. At the corrective level, it is hoped that a better understanding of the dynamics of adjustment can lead to more effective therapeutic interventions. Nardi, Lichtenberg and Kaplan (1994), for example, used desensitization techniques to eradicate anxious and avoidant behaviour in recruits with phobias as well as teaching them adaptive coping skills.

Objectives of the Present Research

This study seeks firstly to discover the factors that affect coping amongst National Service recruits who undergo basic military training as measured by the presence of psychological symptoms, physical performance and the ability to graduate. This study looks at the factors which affect coping such as personality factors, the use of various coping strategies, expectations of mental and physical preparedness, perceived social support, the presence of personal problems and medical problems, and pre-enlistment fitness level of the recruits.

The second objective of the study is to explore the relationship of situational and structural factors that affect the capability of the recruits to cope. The situational

factor is the comparison of coping ability low and high periods of stress, as defined by the level of difficulty of training at different points of time. Structural variables include factors that are less malleable to change and are more stable across time, such as personality variables. This research seeks to explore whether coping strategies change across situations or whether coping strategies are more related to the personality of the individual. Do individuals with certain personality types consistently use certain coping strategies across situations? The research hence aims to identify psychologically vulnerable individuals so that steps can be taken to help such recruits. Assessing the links between coping and personality variable may help to explain why certain personality factors are related to negative outcomes or distress. It serves as a potential heuristic tool to screen and identify psychologically vulnerable individuals and hence monitor their distress levels during military training.

Rationale of the Research

There is a shortage of research that examines more than one trait variable at a time in the study. This approach reflects broader conceptual schemes as it looks at coping in the context of the whole person, who has a set of hierarchical belief system, life pattern of plans and social connections. According to Lazarus (1993),

“Coping process measures would be far more meaningful and useful if we knew about the persons whose coping thoughts and actions in specific contexts are being studied. Now they tend to be disembodied, as it were, from the person.” (p.241)

This study explores several personality variables which function at the unconscious level, conscious intra-individual variables such as expectations and fitness level, other inter-individual variables such as socioeconomic status, race and educational level and extraneous variables such as punishment on the effects of physical and mental well-being.

Significance of the Study on Coping with Basic Military Training

There is a dearth of locally published research looking at the effects of personality and attributional styles conjoined with adjustment. Furthermore, a literature search failed to find any local published research on coping with Basic Military Training in the Singapore Armed Forces.

Coping in the Singapore Context

The Institute of Mental Health in Singapore has designed an unpublished local Coping Scale entitled Stress, Coping and Personality Inventory (SCOPE) to assess work-related stress. This scale draws on several dimensions of coping, including coping strategies, personality variables and situational variables. It was adapted from coping scales such as the COPE inventory (Carver, Scheier and Weintraub, 1989) and includes constructs such as problem-focused coping, behavioural avoidance, emotional avoidance, cognitive avoidance, seeking social support, acceptance and growth, substance use, planning and persistence. Personality

variables include hardiness, trait anxiety, optimism, hostility and perfectionism. Workplace variables include work overload, environmental stressors, responsibilities, personal constraints, role conflicts and ambiguity, organizational tension, career limitations and relationship difficulties. The researchers at the Institute of Mental Health of Singapore are currently studying the validity of the instrument. This research on coping with Basic Military Training can help to validate the Stress, Coping and Personality Inventory by comparing its coping strategy constructs with that used in the Ways of Coping Questionnaire. It can also help to elucidate on work place stress and its coping by comparing environments where the employee seeks out the job of his or her choice against one where the person is conscripted.

The Possible Combat Stress Reactions in Times of War

This study also provides a rare opportunity to examine the possible psychological effects of war on Singaporeans. The study of coping with military training provides the opportunity to study some of the effects of combat stress reaction, which is an adjustment disorder rather than the more severe reactions found in post traumatic stress disorders. Studies such as those of the Israeli war experience and military adjustment have shown that there is a vulnerability component in which certain persons exposed to war are more likely to have more severe negative psychological reactions than others (for example Solomon, Noy and Bar-On, 1986).

Factors Related to Emergency Behaviour Operations

The present study may also further elucidate on the effectiveness of disaster planning operations that are currently used by Singapore's commissioned Emergency Behaviour Officer Committee and which includes involvement by the Ministry of Health, Ministry of Education, Civil Defence Force, Police Force and the Singapore Armed Forces. This research may help to elucidate on the effectiveness of the Critical Incident Stress Debriefing technique (Mitchell and Everly, 1996) which is currently taught to emergency officers in managing traumatic incidents.

Theoretical Models of Stress and Coping

The following paragraphs describe models of stress and coping that are used in the conceptualization of research questions in this study.

Three Models of Stress

There were certain limitations in stimulus-based model of stress (Holmes and Masuda, 1974), which defines stress as a force being exerted and which results in a strain on the person experiencing. According to Lazarus (1966), no objective criterion could be used to describe a situation as stressful, only the person experiencing it could do so. This subjective component of stress definition

resulted in the demise in popularity of the stimulus-based model, which was later replaced by the response-based model of stress. Selye (1976) introduced the notion of stress-related illnesses in terms of the general adaptation syndrome. He postulated that stress is the non-specific response of the body to any demand placed on it. However, this model was criticized in that further research found physiological specificity of responses which depended on both the person and the situation (Mason, 1975).

The transactional approach has overtaken response-based approaches. In this process-oriented model, stress is conceptualized in terms of a relation between person and environment. It is seen as necessary to consider three conceptual domains of the stress process, including the source of the stress, mediators of the stress response and the manifestation of stress. Demand is the product of actual demand, perceived demand, perceived ability and actual ability. Stress is the subjective experience and is contingent upon the perception of the situation. It is based on the cognitive appraisal of the individual in terms of the importance of the event as well as his or her resources. A state of stress is the imbalance between perceived demand and perceived ability to meet the demand.

This model emphasizes the dynamic and interactive nature of stressful situations. Cognitive appraisal is a key construct. The way that individuals perceive specific stressful events and respond to them, rather than generalized perceptions of stress is focused upon. Coping is viewed as a response to perceived stress. Lazarus and

Folkman (1984, p. 141) define coping as “constantly changing cognitive and behavioural efforts to manage specific external and/ or internal demands that are appraised as taxing or exceeding the resources of the person.” Coping encompasses cognitive and behavioural strategies used to manage a stressful situation (problem-focused coping) and the negative emotions associated with it (emotion-focused coping).

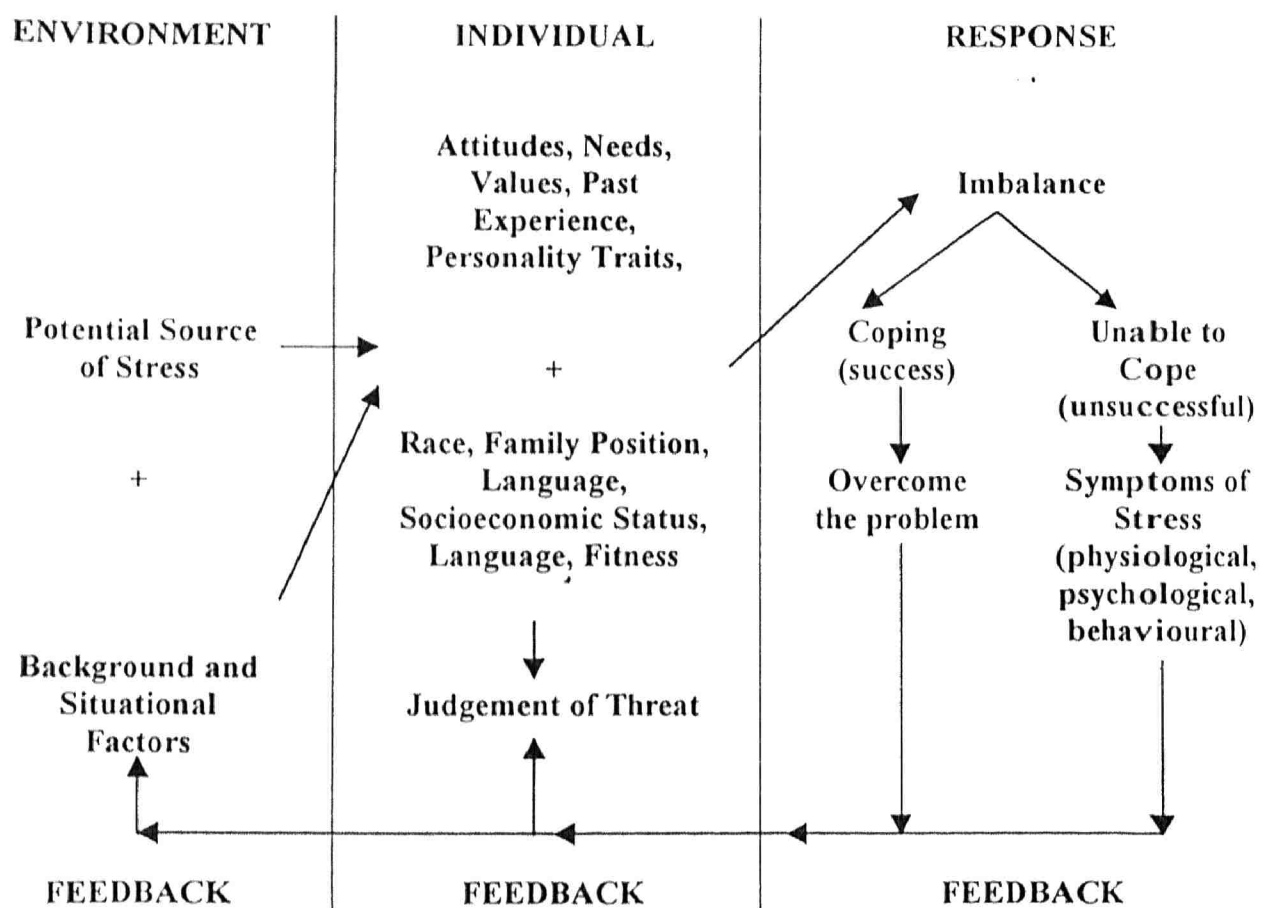


Figure 1. A Transactional Model of Stress and Coping

Note.

From Understanding stress: Psychological perspective for health professionals, (p. 18), by V. J. Sutherland and C. L. Cooper, 1990, London: Chapman and Hall.

The Additive and Interaction Models of Personality and Coping

To explore the research objective that compares situational versus trait factors on coping, two models of personality and coping are put forward. These are the additive model and the interactive model (Hewitt and Flett, 1996). The comparison between these two models has direct implications on therapeutic intervention. If coping is a personality trait in action, this would indicate that it would be more meaningful to use intervention techniques that take into consideration the enduring traits of the individual. If on the other hand situational differences form a larger variance, trait becomes less important than addressing situational factors. If there is an interaction between personality and situation, then one must take into consideration both factors.

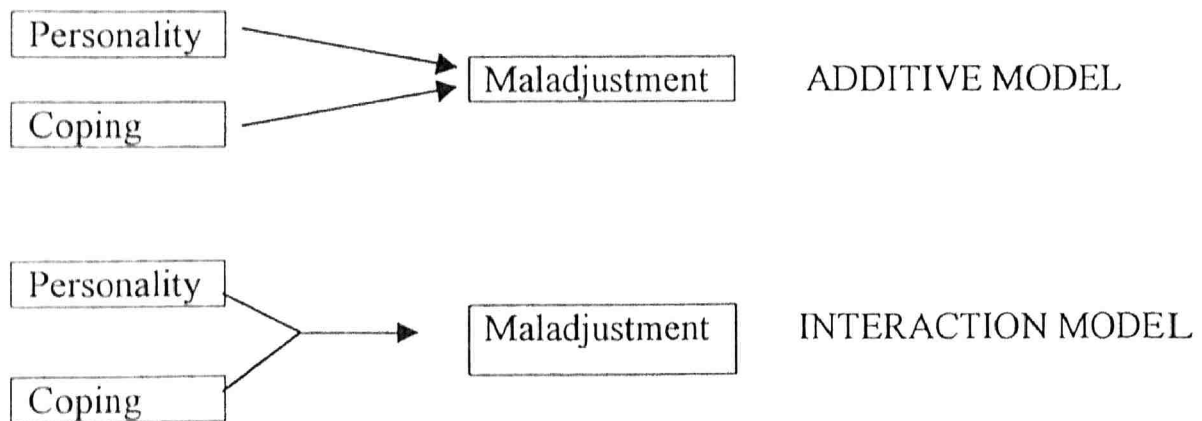


Figure 2. Two Models of Personality, Coping and Maladjustment

Note.

From Handbook of coping, p.411, by P. L. Hewitt and G. L. Flett, 1996, New York: John Wiley and Sons, Inc.

The first model, the additive model, assumes that both personality and coping make independent contributions to maladjustment. This model assumes that certain personality variables and coping strategies are uniquely related to maladjustment. The second model, the interactive model assumes that certain personality variables interact with coping variables to produce maladjustment.

Research Questions

This section deals with the specific research questions.

- I. What are the relationships between the ability to cope with Basic Military Training as measured by
 - a. the extent of psychological symptoms reported,
 - b. performance on the Individual Physical Proficiency Test and
 - c. completion of Basic Military Training, and the following factors
 - i. having personal problems before enlistment and having more personal problems than usual during high stress period of training?
 - ii. perceived social support during high stress period?
 - iii. personality, in particular neuroticism, extraversion, psychoticism, social desirability and impulsiveness?
 - iv. coping strategies, including confrontative coping, distancing, self-control, seeking social support, accepting responsibility, escape-avoidance, planful problem solving and positive reappraisal?
 - v. mental and physical preparedness?

- vi. pre-enlistment fitness level?
- vii. medical status such as the presence of medical conditions before enlistment and the deterioration in health resulting from new or worsened medical conditions?
- viii. exogenous factors, including type of medical leave given by the medical officer, whether the recruit is given weekend confinement punishment; whether he is given a secondary appointment; his family income and the type of housing he lives in?
- ix. endogenous factors including his age; race; birth position in his family; the number of languages he speaks and his educational level?

2 What are the factors which predict

- a. the likelihood of having psychological symptoms,
- b. the level of physical performance as measured by the Individual Physical Proficiency Test, and
- c. the likelihood of completing Basic Military Training?

The factors under study include having personal problems, feeling socially supported, personality type, the use of different coping strategies, mental and physical preparedness, pre-enlistment physical fitness level, and medical status. It also includes exogenous such as type of medical leave given, whether the recruit is given weekend confinement punishment, whether he is given a secondary appointment, his family income and the type of housing he lives in. It also

includes endogenous factors such as his age, race, birth position in his family, the number of languages he speaks and his educational level.

- 3) What are the relationships between personality, coping strategies and situational factors on the presence of psychological symptoms? Firstly, what are the types of coping strategies used by National Service recruits with high, medium or low levels of extraversion, neuroticism, psychoticism, social desirability and impulsiveness and what are the effects of the use of these coping strategies on psychological symptoms? Secondly, do coping strategies used by the different personality groups change between pre-enlistment period, during high stress period and low stress period of Basic Military Training and how does this impact on psychological symptoms? Thirdly, are there any interactions between personality and situational factors in the use of coping strategies?

Definition of Terms

Military training stress is defined as the amount of effort needed to deal with changes in living arrangements, physical training, combat training and taking of tests during the 10 weeks of Basic Military Training.

Coping outcome is defined objectively as the taxing of one's effort to cope with the strain from the environment and is measured by the performance output of the

individual on the Individual Physical Proficiency Test as well as the completion of training. However, the effect of stress is also dependent on the individual's perception, that is his appraisal. These appraisals are in part dependent on past experience of success or failure, as well as unconsciously through personality traits. Self-perceived levels of psychological symptoms including anxiety, depression, somatic symptoms and social dysfunction thus also define coping outcome.

Personality is defined as the dispositional tendency or trait to perceive things and events in a certain way at an unconscious level. This leads to major patterns of behaviour. Personality traits include neuroticism, which measures emotionality. Extraversion is the tendency for individuals to prefer social contact. Psychoticism measures tough mindedness or a tendency to be less empathic. Social desirability measures a tendency to conform. Impulsiveness is the tendency to act out without weighing the consequences of one's actions.

Personal problems include family problems such as relationship problems with relatives and hardship, as well as self-problems such as interpersonal problems with friends, social problems and psychological problems. Perceived social support includes support from a significant other, family and friends.

Coping strategies are conscious cognitive and behavioural efforts to manage external and internal demands, which are appraised as taxing on the individual's resources. Specific coping strategies are described in chapter three.

Mental and physical preparedness are indirect measures of motivation and describes the extent to which the recruit feels prepared to do Basic Military Training.

Psychological symptoms refer to the subjective feelings of anxiety, depression, somatic and social problems that are reported by the recruits.

Assumptions

The following assumptions are made:

1. It is assumed that the five personality types are not mutually exclusive, that is, every recruit has varying degrees of extraversion, neuroticism, psychoticism, social desirability and impulsiveness.
2. It is assumed that personality is a fairly stable trait that has developed over the lifetime of the recruit and governs his thoughts and actions.
3. It is assumed that the coping strategies used by the recruits are conscious efforts to reduce psychological symptoms rather than unconscious defense mechanisms.
4. It is assumed that the recruits will answer as honestly as possible.

- 5 It is assumed that the best possible provision of health care will be given to all recruits and that this study will not impede on health care provision.

Delimitations

Coping is defined both subjectively by the recruits' perception of whether he feels or does not feel well, as well as by certain objective criteria such as performance on the Individual Physical Proficiency Test and whether the recruits graduate. Proficiency in other specialized areas such as technical competency is excluded.

This research may be generalized to other similar events, which are also seen as not within the control of the individual. However, it may not apply to other situations such as work stress or interpersonal stress in the social environment where choice is available.

This research examines coping amongst youths and young adults. Long (1979), using a Singapore sample to study the Eysenck Personality Inventory, found no significant correlation between age and personality. The mean age in this study was 24 years. On the other hand, Eysenck and Eysenck (1964) reported a significant trend for Neuroticism and Extraversion to decline with advancing age. The mean age of this British sample was 27 years. It should thus be cautioned that the findings in the present study amongst 18 to 24 year old males serving

National Service may not be generalized to older age groups, that is above 24 years and older

This chapter presents the general outline on the study of coping with Basic Military Training. In Singapore, Basic Military Training can be a major source of stress for the young National Service recruit. As such, the objectives of this study are firstly, to study the factors which predict poor coping outcome, mainly the presence of subjective psychological symptoms, as well as physical performance output and graduation from the School of Basic Military Training. This study also explores the link between personality and the type of coping strategies used by persons with specific personality traits. There are several benefits to be gained from such a study.