

ment, and is therefore situation-specific. Trait-anxiety is the result of past experience in dealing with threats, and thus becomes an acquired or learned disposition. It determines a person's view of and reaction to stress. (Lazarus, 1966)

Trait-Anxiety and the Coping Process

Whether trait-anxiety is a result of the individual's problem-solving history or the result of his early up-bringing, there is general agreement that the level of trait-anxiety is highly related to adjustment or to coping behavior. This relationship is exemplified in the study done by Hall (1974) where high- and low-anxious subjects were differentiated vis-a-vis type of defensive reactions to various stress situations. One of his findings is that in the failure situation, high-anxious subjects had more denial responses and fewer rationalization responses than low-anxious subjects. This supports the hypothesis that high-anxious individuals use a different type of defense from low-anxious subjects.

In another study, the degree of trait-anxiety of the individual was shown to play an important role in determining the chance of doing well in military service. Friedman (1975) found that the chance of ineffective functioning for men with pre-existing overt neuroses was seven or eight times that for the low-anxiety individual, whether in the family, school, work, or community. Stouffer's (1949) study on the American soldier in combat showed how fear resulted in disorganized responses that led to catastrophes, including the death of comrades and the failure of a critical military operation.

Coping can be described in terms of a model of the combat soldier as a system with inputs and outputs of energy and information. Each system tends to maintain steady states of many variables which are crucial for its continued existence. Inputs which force the variables beyond this range are stressors. Adjustments made to restore equilibrium constitute the process of coping which involves reorganizing certain subsystems to prevent the failure of other subsystems.

Coping with combat stress can be defined by inputs, outputs, or both. Input definitions involve underloads or overloads of stressful energy or information such as (1) predispositional; and (2) cognitive factors. Under the first factors are: (a) family background and demographic variables; and (b) personality differences. Included among the cognitive factors are: (a) extent and nature of perceived stresses in combat; and (b) degree and nature of perceived emotional supports received from the military organization, family, and significant other persons. Output definitions are based upon variables which are displaced from equilibrium under stress. In this study, it is the performance effectiveness of the soldier in combat.

An explanatory model (see Figure 1) is designed to describe the conflux between coping pattern and adjustment of the combat soldier. It presents the interrelated factors from which the pattern of coping emerges and with which it interacts. Incorporated in this model is an attempt to account for the type of coping pattern that the combat soldier utilizes to handle the stresses of combat.

CONCEPTUAL FRAMEWORK

This study adopts a holistic posture in studying coping mechanisms used by anxious and non-anxious Filipino combat soldiers. The model used has strong cognitive components, allowing for behavioral styles related to variables operating in the contemporary Philippine setting.

HYPOTHESES

1. The individual's coping pattern may be active or passive; it may also be characterized as constructive/compliant, hostile, or avoidant. To the extent that active solutions are generally more realistic than passive ones, it is hypothesized that low-anxiety respondents will be more likely than high-anxiety respondents to select active coping patterns. To the extent

that constructive/compliant solutions are generally more realistic than hostile or avoidant ones, it is hypothesized that low-anxiety respondents will be more likely than high-anxiety respondents to select constructive/compliant coping patterns.

2. There is a distinction between realism and effectiveness although the two are related. While active and aggressive patterns may seem, in general, to be realistic, the efficacy of any one coping mechanism is by and large situation-bound. Hence, it is hypothesized that low-anxiety respondents will be more likely than high-anxiety respondents to select effective coping patterns across recurrent problem situations.

3. Consistent with the view of the psychology of adjustment that superior functioning in one's role is a measure of effective coping behavior, it is hypothesized that low-anxiety respondents will be more likely than high-anxiety respondents to be judged as superior in their work.

METHOD

Subjects

The subjects are combat soldiers from the Philippine Marines who had been assigned to the province of Sulu. The Fourth Battalion of the Philippine Marines was selected for its

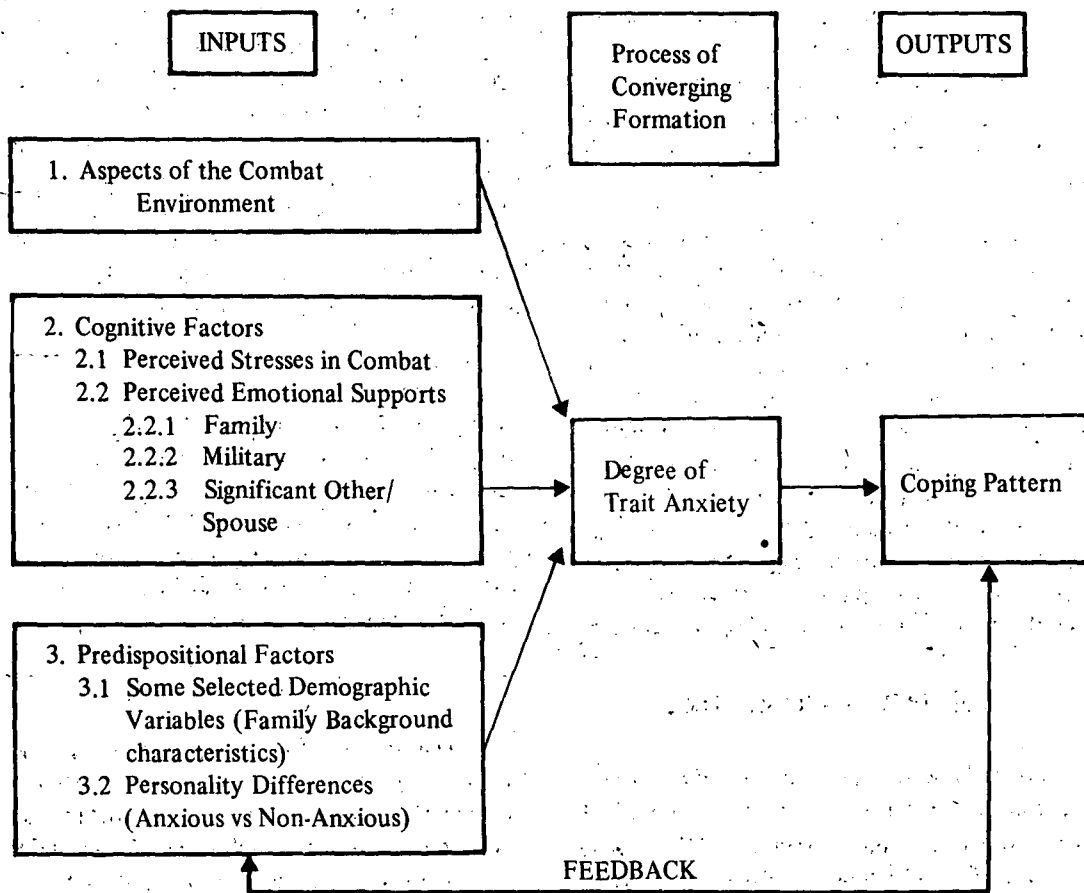


Figure 1. Scheme Showing the Complex Variable interactions Affecting Adjustment To Combat Stress

accessibility to the investigator, familiarity with its organizational structure, and availability of data regarding combat. This Battalion at the time of the research was stationed in Fort Bonifacio for retraining and thus, was available for this study. It was composed of 440 combat soldiers, "battle-tested" in Jolo and Basilan. Some of these soldiers were confined at the psychiatric ward of the Armed Forces Medical Center at the time, and some were detained in Fort Bonifacio stockade on the following grounds: a) maltreatment of civilians; (b) non-payment of bills; (c) indiscriminate firing while under the influence of liquor; (d) absence without official leave; and (e) frustrated homicide.

The high-anxious Ss initially numbered fifty (50) and were selected by tactical officers because they developed overt anxiety reactions and were unable to complete combat assignment. Ninety (90) low-anxious Ss were chosen because of their highly successful adjustment to the stress of combat assignments. The sample of one hundred forty (140) were then administered the Pilipino Anxiety Scale and the Sielberger Trait Anxiety Test to ascertain the degree of trait-anxiety in the two groups. From the remaining number that passed the established criteria, random selection was used to obtain the final sample of seventy-two (72) with thirty-six (36) Ss in each group.

Instruments

Data for this study were obtained by means of the following instruments:

1) Military Survey — this was a self-administered schedule which solicited personal information from the respondent as well as the qualitative expression of his attitude(s) towards various categories of stress and the emotional support received from the military organization, family, spouse or significant other.

2) Pilipino Anxiety Scale — a 50-item scale that measures degree of anxiety.

3) Coping with Stress Questionnaire — a 35-

item test which determines how frequently the subject uses listed coping mechanisms and how effective these are found to be.

4) Responses to Stress Questionnaire — a questionnaire with 15 hypothetical situations classified into three major groups: a) lack of resources; b) family and personal crisis; and c) personal threat or harm to which the person makes his own unstructured response.

Procedure

The procedure consisted of the administration of the instruments to the Ss. Observations, problems and soldiers' comments were noted by the assigned examiners. Performance ratings were obtained from the subjects' respective officers.

Analysis

The strategy for analysis consisted of two phases. In the first phase, comparisons were made between the two groups on those variables, which, according to the literature reviewed, are related to trait-anxiety and coping behavior. Specifically, the two groups were compared on demographic characteristics, family history and experience in the combat zone. This was done to determine the similarity of the two groups, except for the relevant variable of trait-anxiety.

The second phase consisted of testing the hypotheses related to the various measures of coping behavior.

Both parametric and non-parametric tests were applied. To test for significance of differences, the t-test for independent samples was used. The Friedman analysis of variance was used to find the relationship between the rankings of the two groups for each coping mechanism. A one way analysis of variance was run to analyze the differences among the categories of coping mechanisms. The Kolmogorov-Smirnov Test was used for the distribution of responses to the different situa-

Table 1
Demographic Variables

Variables	High Anxious		Low Anxious		Total		p <
	No.	%	No.	%	No.	%	
<u>Age Range</u>							ns
17-25	25	69	20	55	45	63	
26-35	11	31	15	43	26	36	
36-45	0	0	1	3	1	1	
<u>Educational Attainment</u>							ns
College	10	28	28				
High School Graduate	26	72					
<u>Civil Status</u>							ns
Single	34	94					
Married	2	6					
<u>Rank</u>							.05
Private	19	53					
Corporal	12	33					
Sergeant							
Staff/Technical	5	14					
<u>Regions^a</u>							ns
I	14	39					
II	1	3					
III	1	3					
IV	1	3					
V	1	3					
VI	2	6					
VII	9	25					
VIII	0	0					
XI	0	0	2	6	2	3	
XII	3	8	1	3	4	6	
XIII	4	11	2	6	6	8	
<u>Years in Military Service</u>							ns
2-5	26	72	21	58	47	65	
6-9	10	28	14	39	24	33	
10-up	0	0	1	3	1	1	
<u>Father's Occupation</u>							ns
Military	8	22	1	3	9	13	
Professional ^b	3	8	5	14	8	11	
Skilled and Semi- ^c	18	50	15	42	33	46	
Skilled							
Unskilled	7	19	15	42	22	31	

a No Subjects from Regions IX and X.

b refers to types of occupation (whether lawyer, teacher or engineer) requiring a higher level of education or a formal body of knowledge.

c types of occupation (whether driver, mechanic, and so forth) not requiring a formal body of knowledge but rather experience of training for the work.

d types of occupation (vendor, stevedore, caminero, and so forth) that do not require any schooling but training to qualify for the particular job.

tions.

The level of significance was set at .05 in all cases.

RESULTS

Findings from Phase 1 of Data Analysis

A. Demographic Background

The soldiers were found to come from various administrative regions, with one-third of them from Region I. They ranged in age from seventeen to forty-five years, with nearly two-thirds of them being twenty-five years or below. Nearly two-thirds finished high school. Nearly half classified their fathers as skilled or semi-skilled workers. Almost all the respondents were unmarried.

Half of the respondents held the rank of private. Nearly two-thirds had spent two to five years in a combat zone.

Table 1 shows the distribution of these variables in the two groups. There was one statistically significant difference in the demographic variables — rank: non-commissioned officers were over-represented in the low-anxiety group. (See Table 1.)

B. Family Background

One-sixth of the respondents were eldest children. The respondents' number of siblings ranged from one to twelve, with an average of six.

There were no significant differences between the two groups on these two variables.

However, the two groups did differ with regard to what they identified as the major problems that faced their respective families. Over one-fourth of the high-anxious marines indicated family or marital discord as a major problem that faced their families. In contrast, none of the low-anxious marines indicated such a problem.

C. Degree of Combat Stress Experienced

Statistically, there was no significant difference in the way the two groups evaluated the conditions listed in the Military Survey. However, high-anxious marines, as a group, ranked the following conditions higher than their counterparts: (a) filth, disease and poverty; (b) lack of water; (c) lack of food; (d) officers' fears; (e) problems with superior officers; (f) inadequate training; (g) every man-for-himself attitude; and (h) losing the battle. Rank differences ranged from ten to four.

The low-anxious marines ranked the following as more stress-producing than did the high-anxious group: (a) poor discipline in combat; (b) having to kill or destroy as part of job; (c) concern about one's family; (d) death or injury to other soldiers; (e) boredom; (f) lack of conviction about what they were fighting for; (g) abuses; (h) fear of injury; (i) officers' hesitance to take risks; and (j) problems with Muslims. Rank differences ranged from eleven to four.

D. Emotional Support Received

The respondents received a large amount of emotional support from the military and from their families, but there was no significant difference in the way the two groups perceived the degree of emotional support obtained from the three possible sources. (See Table 2.)

Findings from Phase 2 of Data Analysis

A. Coping Mechanisms

There were six types of coping mechanisms in the Coping with Stress questionnaire:

1. Active-constructive accepting;
2. Active-Escape;
3. Passive-Escape;
4. Passive-Accepting;
5. Active Hostile/Aggressive; and
6. Passive Hostile/Aggressive.

It was found that low-anxious marines were less likely than high-anxious marines to resort to active-hostile mechanisms ($p < .05$). At this

Table 2

Mean Rating of Perceived Emotional Support

Source	High Anxious (n = 36)	Low Anxious (n = 36)	p <
Military Organization	40.028	40.194	ns
Parent	11.028	12.028	ns
Spouse/Significant Other	31.148	30.833	ns

level, then, there is at least only partial support for Hypothesis 1.

Reducing the above categories to just the active and passive categories, no significant difference was found between the two groups in their choice of this coping category.

The hypothesis that low-anxiety respondents are more likely to use acceptance rather than hostile or escape mechanisms was only partially supported. While the low-anxious group showed less tendency than their counterparts to resort to escape and hostile mechanisms, no signifi-

cant difference between the two groups was found with regard to the choice of acceptance mechanisms. (See Table 3.)

B.- Response to Situational Stresses

The 15 hypothetical situations in the Response to Stress Questionnaire were compressed into the following categories:

- a) lack of resources;
- b) family/personal crisis; and
- c) personal threat or harm.

An analysis of these three situational categories by way of a Friedman analysis of variance,

Table 3

Friedman Analysis of Variance of Coping Strategies by High Anxious and Low Anxious Group (n = 72)

Coping Strategy	χ^2	p <
Passive	4.5	.05
Active	8.0	.05
Escape	5.333	.05
Acceptance/Constructive	.33	ns
Hostile/Aggressive	10.083	.05

showed that low-anxious Ss were more likely than the high-anxious Ss to choose coping mechanisms appropriate to the stress situations involving both family crisis and personal threat. There were no significant differences between the two groups in choosing coping mechanisms appropriate to situations involving lack of resources.

C. Effectiveness Ratings

Ratings obtained by Ss ranged from 3.60 to 4.00. The results of statistical analysis reveal that low-anxious soldiers were more likely than high-anxious soldiers to be rated as efficient by their officers. (See Table 4.)

DISCUSSION

Effects of Personal History

There were no statistically significant dif-

ferences between the high-anxious and low-anxious marines on demographic characteristics, family background, amount of combat stress experienced and amount of emotional support received.

There are exceptions, however. The high-anxious group was more likely to cite family discord as a major problem that faced their families. Another difference was rank. There are more non-commissioned officers in the low-anxious group. Except for these differences, the data suggest that the two groups can safely be considered as comparable. It would then be possible to compare the coping mechanisms of both groups without worrying whether any difference is due not so much to their degree of anxiety as to their differences in background characteristics, amount of combat stress experienced, or amount of emotional support

Table 4

Contingency Table of Performance Rating, by Group

Performance Rating	Group	
	High Anxious	Low Anxious
3.60-3.64	10	7
3.65-3.69	3	2
3.70-3.74	14	7
3.75-3.79	3	3
3.80-3.84	5	8
3.85-3.89	1	3
3.90-3.94	0	4
3.95-3.99	0	1
4.00	0	1
TOTAL	36	36

Chi Square significant at $p < .05$

received. Apparently, a history of family discord and rank could qualify as alternative explanations for the hypothesized relationship between degree of trait anxiety and coping mechanisms.

Although the amount of stress generated by various combat conditions proved insignificant, the differences in the way the two groups ranked these conditions is helpful in relating degree of trait anxiety and coping mechanisms.

The situations which the low-anxious marines ranked as more stressful were essentially situations that involved the welfare of the units as a whole: poor discipline in combat, death or injury to other soldiers, lack of conviction regarding the cause they were fighting for and officers' hesitance to take personal risks. They were also more likely than the high-anxious soldiers to rank as more stressful situations involving the larger community such as having to kill or destroy as part of the job, abuses, problems with Muslims, as well as those involving their families.

In contrast, the situations which high-anxious marines ranked as more stressful were those that involved personal deprivations and concern for self such as filth and disease in the combat zone, lack of food, lack of water, and the "every-man-for himself" attitude. Also of possible interest is the tendency of high-anxious marines to cite as more stress-producing problems with superior officers as well as officers' fears being transmitted to the men.

While the respondents experienced the same conditions and the same level of stress produced by conditions such as financial problems, length of combat assignment, lack of equipment, insufficient medical care, among others, the low-anxious soldiers were likely to perceive these stresses as affecting everyone in the larger unit and therefore, were likely to respond to these threats as members of the larger unit. In contrast, the high-anxious soldiers tended to see these stresses as affecting themselves personally

and hence, were likely to respond to these stresses as individuals.

Rank and History of Family Problems, as Influenced in Coping Ability

Adjustment to combat (being a "good soldier") is better among marines who have stable homes and a healthy childhood. The soldier's coping strategies are also influenced by the breadth and extend of his previous experiences. Evidently, the more information and background an individual can bring to bear on a complex environmental stimulus or problem, the easier it will be for him to classify different procedures for the solution of a problem. Hence, the broader his experience — in this case, the more senior and higher in rank the soldier is — the more opportunities he has to see the results of previous decisions, and the more effectively he can appraise and solve a given problem. There is then a relationship between seniority in rank and coping ability.

This alternative explanation could be stated simply as follows: Higher-ranking soldiers are more likely than lower-ranking soldiers to be low in anxiety, be more realistic in problem-solving, and high in efficiency. Moreover, soldiers with problem-solving skills and high efficiency ratings were more likely to be rewarded with staff and/or technical positions which, while still within the combat zone, are not really concerned with actual combat. These positions and their associated responsibilities are less anxiety-producing than the positions of line soldiers and non-commissioned officers. Hence, any difference in problem solving skills and efficiency between those who are high-anxious and low-anxious may be simply due to the fact that about one-fourth of the low anxiety group consisted of technical and staff sergeants while the high anxiety group consisted solely of marines who were "on the line."

Coping with Situational Stress

As hypothesized, low-anxious marines were more likely than high-anxious marines to select

realistic coping patterns in situations involving family crisis, personal harm and danger, and lack of resources.

The manner by which the low-anxious group evaluated the magnitude of various stresses suggest that they saw themselves as more closely linked to collectivities – the military unit, their families, and the larger community of which they were a part. It is not surprising, then, that they reacted to family crisis situations more realistically, giving responses that involved dialogue with family members and consultations with officers and peers.

The less anxious marines tended to be a little more realistic in coping with a lack of resources although this difference was not statistically significant. There were hardly any differences between the two groups in their evaluation of the stress engendered by financial problems, lack of opportunity for rest and recreation, insufficient medical care, and so on. By and large, these situations with which both groups were in substantial agreement involved the lack of resources.

Efficiency and Effectiveness

The greater likelihood that low-anxious marines would be rated as more efficient than high-anxious marines needs further comment: if low-anxious marines were in fact more likely to choose effective coping mechanisms, it should follow that they would be rated as more efficient by their superiors.

Overall, the findings give at least partial support to the set of hypotheses guiding this study. However, this support does not extend to the details. The major reason for this is the apparent homogeneity of the two groups.

IMPLICATIONS

The findings of the study have implications for: (a) combat soldiers' stress patterns and their emotional support system; (b) combat soldiers' selection; (c) treatment of combat-

related disorders; and (d) combat soldiers' mental health education.

A. Combat Soldiers' Stress Patterns and their Emotional Support

Combat is, in itself, a highly stressful situation but for our marines, it is subordinated to being poor. Handicapped by their location in the opportunity structure of society, they have to find ways and means to reach out for the goals of sufficient food, adequate housing and clothing and education for their children. For these combat soldiers, economic stress is more a chronic problem than the threat of physical harm or death, the fear of depreciation in self-esteem or status in the combat zone. This was the number one motivational structure that indefinitely sustained the average soldier under the stress of combat. The men hold out long enough and fight well enough in order that the family back home will have "three meals a day."

On the other hand, other factors sustained them in the face of extreme stress – the guidance and support of the formal Marines system, the informed combat group, convictions about the war and the enemy, various specific hopes and goals made combat more endurable.

B. Combat Soldiers' Selection

Combat training is exhaustive, and recruits are asked to perform to the limits of endurance. Findings suggest that pre-service factors including pre-stress personality, family life and psychosocial variables appear to be related to in-service adjustments among combat soldiers. The soldiers' adjustment complications are related to a lifelong pattern of coping. The background of the applicant, therefore, should be given more attention during standard psychiatric selection interviews.

C. Treatment of Combat-Related Disorders

The psychiatrists and psychologists who treat soldiers with combat-related disorders may be so predisposed to see only symptoms of

psychopathology in the combat soldiers they treat, considering these are sick and separated from the conditions that produce them. In the quest for theoretical parsimony, for example, combat stress becomes just stress and combat soldiers just sick patients. On the other hand, in focusing largely on combat stress, other important questions remain unexplored. How did other combat soldiers manage to cope with stresses unique in Jolo? The writer is of the opinion that the mental health professionals can enrich the treatment process by helping the soldiers develop more deliberate and purposeful coping strategies.

D. Combat Soldiers' Mental Health Education

On the whole, the results indicate that, while providing for the soldier's combat requirement is important, maintaining his psychological well-being is equally vital. In terms of coping abilities, the low-anxious soldier is a lot better off than his high-anxious counterpart.

In understanding such differences, the pre-stress personalities of the high-anxious soldiers should be considered. The existence of greater stress vulnerability has been underscored by studies on coping. For the high-anxious soldier, the reality of his combat world is characterized by all kinds of pressures that come with a stressful style of life. Because problems are real and there is still the residue of his stressful life before the service, he is ill-prepared and ill-

equipped to deal with difficulties inherent in such environment.

The world of the low-anxious soldier before his military service seems different. With the less threatening quality of his family life, the low-anxious soldier does not actually come face to face with the many complex problems that are rooted in the high-anxious soldier's pre-service life. Efforts could be geared towards developing the coping strategies of the soldiers by providing them more education in mental health. Such exposure may offer them and especially the high-anxious group, new and greater possibilities for personal growth, and increase their level of awareness of their functioning.

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