Managing Situation Induced Stress in Military Units

Orlindo Gouveia Pereira and Jorge Correia Jesuino
Universidade Nova de Lisboa

Research and Advanced Concepts Office
Michael Drillings, Acting Director

March 1996

United States Army
Research Institute for the Behavioral and Social Sciences

Approved for public release; distribution is unlimited.
NOTICES

DISTRIBUTION: This report has been cleared for release to the Defense Technical Information Center (DTIC) to comply with regulatory requirements. It has been given no primary distribution other than to DTIC and will be available only through DTIC or the National Technical Information Service (NTIS).

FINAL DISPOSITION: This report may be destroyed when it is no longer needed. Please do not return it to the U.S. Army Research Institute for the Behavioral and Social Sciences.

NOTE: The views, opinions, and findings in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision, unless so designated by other authorized documents.
Managing Situation Induced Stress in Military Units

Orlindo Gouveia Pereira and Jorge Correia Jesuino (Universidade Nova de Lisboa)

Universidade Nova de Lisboa
Faculdade de Economia
Rua Marques da Fronteira, 20 1000 Lisboa
Portugal

U.S. Army Research Institute for the Behavioral and Social Sciences
ATTN: PERI-BR
5001 Eisenhower Avenue
Alexandria, VA 22333-5600

Approved for public release; distribution is unlimited.

COR: Michael Drillings

An experimental leadership under stress course for voluntary Navy 1st lieutenants took place during 2 weeks in June-July 1992, and was the final empirical test for a model course, constructed along the present project. The rationale and step-by-step approach were detailed in the previous interim report. A combination of lectures, individual and group assignments, and active teaching techniques were used in different stress loads to convey new concepts, change attitudes, train skills, and develop a personal leadership model and style. The results were positive and encouraging; the model can be generalized to other military (or civilian) contexts. It is recommended that the course should be content and task specific and restricted to the operational level of leaders prone to work under stress, of the same rank, age, and background, to be more effective. A 3-week course would be ideal. A “trouble-shooting guide” for trainers is included.
A MODEL COURSE OF LEADERSHIP UNDER STRESS

FINAL REPORT

ABSTRACT

An experimental leadership-under-stress course for voluntary Navy 1st. lieutenants, took place during two weeks, in June-July, 1992, and was the final empirical test for a model course, constructed all along the present project. The rationale and step-by-step approach were detailed in the previous interim report.

A combination of lectures, individual and group assignments and active teaching techniques were used, in different stress loads, to convey new concepts, change attitudes, train skills and develop a personal leadership model and style.

The results were positive and encouraging so that the model can be generalized to other military (or, even, civilian) contexts. It is recommended that course should be context and task-specific and restricted to the operational level, to leaders prone to work under stress, of the same rank and age and background, to stand a better chance to be effective. Three weeks would be ideal.

A "trouble-shooting guide" for trainers is included.
The present course, specifically tailored for Portuguese Navy first lieutenants, was aimed at testing, in the field, the principles developed for a model course of leadership under stress, in the present and the previous contract. The rationale and the guiding principles were object of the previous report.

The course was run at the Instituto Superior Naval de Guerra (Portuguese Navy Higher Institute for War Studies), between June 30 and July 10, 1992.

Eleven first lieutenants (two of them marines) and one lieutenant-captain, were selected by the Navy Personnel Department from the answers to an invitation directed by the official channels to all active first lieutenants. The inclusion of one lieutenant-captain was negotiated and accepted on the grounds that he had been appointed instructor of leadership in the Portuguese Naval Academy for the academic year 1992-1993.

The instructors were Professor Orlando Gouveia Pereira (course director), Dr. Costa Pereira and Dr. Fernando de Sousa psychologists with a long experience in military stress and leadership. Professor Correia Jesuino, should have been also an instructor but, because of circumstantial reasons, could not be present during the only period of time the Institute could hold the course.
Course presentation

One month before the course an invitation was published in the Navy Order.

One week before the course the name of the selected officers was communicated to the Institute.

The course was presented to the officers as follows:

1. Objective

   To provide the officers with a set of skills which are expected to increase their effectiveness on leadership and management.

2. Course structure

   The course is structured around there main areas: the person, the group and the task.

   The leadership areas are considered in a cross-sectional way: symbolic, negotiating and social influence (the basic concept mentioned above was object of a short explanation based on our previous reports).

3. Method

   The course uses active teaching-learning strategies expected to facilitate learning in a short-time basis.
The specific techniques include: theoretical explanations, conferences, individual and group-work, case studies, role playing, movie preparations, and debates. Home-work assignments are used on a daily bases.

4. Attendants

Navy (which implies also marines) first lieutenants.

5. Course duration

Two weeks, full time.

6. Classifications

The attendants are evaluated on a pass/fail base considering their performance results on individual and group-work and class participation.

7. Schedule

Everyday from 0900 to 1300 and from 1400 to 1730.

8. Bibliography

A set of papers was prepared for use during the course. The Institute's Library is open for extended consultation.
9. Administration

Lunch was provided from 13.00 to 14.00 at the officers’ mess.

10. Program

1. Reception and program presentation.
2. Introduction: Military leadership (lecture and discussion).
3. SYMLOG exercise (Group-work)
4. Motivation and leadership (lecture)
5. Stress and military leadership (lecture, case-study, Group-Work).
6. Communication process (Group-work, role-playing)
7. Group dynamics and decision making. (Group-work, simulation exercise)
8. Group case-studies (individual presentations followed by group-work)
10. Leadership theories (lecture and individual presentation).
11. Social influence, conflict and negotiations (Group-work, role-playing).
12. Negotiation exercise (simulation group exercise)
13. Symbolic leadership (individual presentations and debate).
14. Creativity and innovation (group-work and role-playing).
15. Course evaluation (group-work and debate).
COURSE EVENTS

As the basic content of the lectures was detailed in our previous reports, we only present briefly the interactive sessions.

1. Reception
2. Introduction
3. SYMLOG exercise

The aim of these three initial revisions was to have people know each other and adapt to group-work. Besides introducing the program and the basic concepts, we tried to generate maximum information about the instructors and the attendants concerning:

- personal background;
- career;
- expectations and attitudes towards the course;
- motivation (voluntary offer);
- previous experience; (we encouraged the writing of personal cases for further study).

- presentation of problems;
- family and social relations

We provided and discussed the results of the SYMLOG exercise on the third day.
The session began with the introduction of communication and information concepts, followed by the stressing of their important role to individuals, group and organizations.

A listening skills questionnaire was administered in order to help each individual to identify key factors in his listening capabilities to the others' arguments. Key factors of non-verbal communication were also discussed, stressing its influence into the communication process.

A role playing was held in order to identify non-verbal sequences, either in the approach or in the final parts of a brief conversation. The participants analyzed and identified the appropriate sequences.

Next, a short lecture on relevant factors to effective listening preceded another role playing with pre-set roles about an assessment interview between a Navy officer and a Navy Academy candidate. The role playing's objective was to identify the performer's listening capabilities, which were evaluated by means of an evaluation grid analysis. The results were then communicated to the rest of the class in order to show them how to perform in such circumstances. Then, a series of role playing, followed. The class was split into independent teams in which individuals inter-change roles. The results were then discussed.

The session was active and participated, and the discussion revealed the "astonishment", felt by a few about listening mistakes they were not aware of.

A short quiz showed the effectiveness of the session.
The session opened with a discussion on face-to-face relationships, to identify the main factors in each intervention. Emotional states, the way they can be observed, how to evaluate the others, the mistakes usually made, and the way first impressions are formed were analyzed. Relational techniques and interpersonal motivational behavior were presented.

Assertiveness was dealt with, stressing its relevance to interpersonal relationships. Through a BBC’s film Assertiveness at Work we were able to show some assertive behaviors in the work environment. The participants filled a questionnaire were they were asked to identify their personality factors concerning assertiveness.

Next, feedback was dealt with using a questionnaire in which each participant identified the ways he gives feedback to subordinates. Relevant factors on return of information were discussed.

A detailed analysis of performance evaluation was carried out followed by an evaluation interview.

Participants performed a role play about a performance evaluation which had been prepared as a homework assignment. The interview was complex and demanded a lot of interaction among participants. The roles were performed according to the objectives initially proposed, which stressed the importance of the interviewer and interviewee reaching an agreement concerning improvements in their relationships, performance behaviors and future cooperation.
In the end a short quiz was administered to the participants. The majority answered correctly. Interesting aspects were stressed concerning "wrong" answers.

6th SESSION (4 hours) - GROUP PROCESSES: MEETINGS

The session consisted of two parts, the first concerning group processes and the second dedicated to group meetings.

It started with a discussion on individual affiliative needs, steps in group growth, and the main conditions for group working. Next, a short lecture on group effectiveness variables at individual, group and organizational levels, was given.

After splitting the class in 3 teams, each one worked on a case study concerning three different groups inside an organization. The teams had to identify differences in group functioning using group effectiveness variables. After, each team conclusions were discussed by the whole class.

A questionnaire about past meetings' evaluations was answered by each participant. Types of mandatory meetings in organizations and the techniques that must be followed in order to bring about successful work were discussed together with the facilitator's action within the meetings. The VIDEO ARTS' film Meetings and more meetings was presented.

Next a role playing of a meeting where the roles had already been assigned and prepared the day before, was held. Each participant played his role with a series of defense mechanisms.
The meeting was a big success and it was possible to identify the main difficulties that arise in common meetings and which must be overcome by the facilitator. A final discussion allowed a most efficient debate.

A short quiz followed by a discussion of the wrong answers closed the session.

7th SESSION (2 hours) GROUPTHINK

The session was aimed at allowing students to identify groupthink phenomena that could hinder group work and ways to overcome it. The "Brainstorming" work group method for idea generation was also part of the session.

Through NASA exercise, which was performed under several experimental conditions, we were able to generate certain aspects of groupwork, according with various leadership styles. Phenomena like performance and satisfaction, centralized and decentralized leadership, group ages, conformism, polarization, power games and others were discussed.

The CRM's film Groupthink was presented and discussed.

Next we proceeded to analyze the role of associations in thinking operations. The participants were administered a divergent thinking test as a way to practice divergent associations of thoughts, in order to prepare them for brainstorming.

The main characteristics of the method were discussed. Then two six member teams ran a session on brainstorming ideas under different experimental conditions (leadership style and time spent on discussion). In
the end, leadership actions during idea production meetings, application to real life problems and the method itself were discussed.

The homework assigned to the participants asked to analyze a case of their own professional life in which important groupthink phenomena had occurred.

Although there were some very interesting cases brought up, the participants' analytical capability to understand groupthink phenomena was weak. It seems difficult for the individual to remind himself of experiences in a way that, at the time, he was not prepared to organize under certain type of awareness. Although with an anecdotal value, self reported cases will only bring minor illustrations to the subject, if he had not, at the time, the ability to go beyond superficial event analysis.

**8th SESSION** (2 hours) **INFLUENCE PROCESSES**

A homework assignment prepared the discussion on influence and persuasion processes, where relevant factors were stressed. It was followed by an analysis of the power motives based on the results of McClelland's motivation Questionnaire previously administered.

Leadership and management concepts were clarified and each participant evaluated his own leadership style through Hersey & Blanchard's questionnaire. The Contingency theory was discussed.

LMET's influence skills were analyzed and the participants performed a case content analysis about a leadership situation where influence skills were identified. Individual work assignments were discussed in order to identify the proper skills.
The session was productive but rather tiring. Time restraints didn't allow the usual final quiz, nor the visualizing and of the VIDEO ARTS film *who's the boss*.

**9th SESSION** (2 hours) **CONFLICT MANAGEMENT AND NEGOTIATION PROCESSES**

The session began with the analysis of a questionnaire on organizational climate and culture, assigned as homework and related to the military organization. Each participant worked on his Blake & Mouton's questionnaire in order to identify his own style of conflict management.

A lecture on conflict was given, characterizing the concept and identifying the proper tactics and strategies to conflict management.

A role playing on conflict followed. A manager had to solve a conflict with one of his subordinates. An observer filled an evaluation form to allow a discussion on performer's conflict management behavior recognition. Some brief comments about negotiation followed, stressing the various models.

The film *Conflict in the time* was presented and discussed.

The restraints didn't allow a more thorough discussion and the usual quiz.
The goal here was to discuss factors which could hinder the decision making process under stress. The session addressed also group problem solving.

As the simulation prepared to train decision making under stress conditions was not yet ready, we began with an experiment where series of participants tried to guess a word knowing only the first letter. By asking questions about the word they would try to reach the solution. Experimental conditions were four: without time restraints and without a check list of questions to ask the experimenter about the word; the same but with time restraints and check list; with check list and no time restraints; with time restraints and with checklist.

Results were compared with previous experiences in order to better understand the way individuals process information under stress. Next, decision making under stress phenomena was discussed.

A lecture about leadership under stress followed. Experiments on order enforcement under simulated combat situations were presented and discussed.

Moving into a more global model of leadership under stress and after viewing some selected scenes of the German television series DAS BOOT, the various steps on reaching a decision, the leader’s behavior, the kind of stresses subordinates experience and ways to deal with it, were presented and discussed.

The afternoon was spent practicing the CREATIVE PROBLEM SOLVING (CPS) Osborn-Parnes method. Several games and exercises were used in
order to stretch participants' imagination and to allow for devising more and better ideas for problem solving.

The inclusion of the Osborn-Parnes CPS method is based on the hypotheses that creativity training will enhance the individual's decision making ability under stress (time restraints) conditions.

The participants reported very interesting cases in their homework assignments, concerning real situations were they had faced decision making under stress situations. The analysis provided showed an increase of phenomena awareness, comparatively to the groupthink cases early reported, but was still mostly anecdotal and less analytical.

**11th SESSION (6 hours) SYMBOLIC LEADERSHIP**

The goal here was to enable the participants to discuss several important aspects of the symbolism in the armed forces and officer's role in interpreting and translating it into meaningful language and leadership actions. The topics chosen concerned the nature of military profession and military institution, personal and institutional values, loyalty and legitimate avenues of dissent, duty-honor-country, fear, courage, and discipline. Several texts had been issued in the first day in order to allow each working group to prepare a short presentation of the assigned theme to the class.

The session began with a presentation of an opinion survey within the military, concerning institutional and professional matters. The results of that survey were contrasted with the opinion of the participants.

After a hierarchical values questionnaire, was administered, raw data was processed and results discussed within the class. Personal values were
contrasted with organizational values, announced or actually exhibited by the organization.

After the playing of a game about values (simulation TRION, Pfeiffer, 1992), the presentation of the four themes that had been prepared began: fear and courage, loyalty, military character and discipline. Each of the four groups presented the theme in 20 minutes, followed by another 20 minutes of discussion with the class.

As all the presentations had been carefully prepared and rehearsed, the discussions were very rich and participated.

12th SESSION (4 hours) LEADERSHIP THROUGH CREATIVITY AND INNOVATION

The objective was to enable the participants to list blockbusters that could prevent creative thinking from arising into the individual, as well as innovation within organizations.

Through various exercises perceptual blocks were identified. Next came imagery, emotional and cognitive blocks. Cerebral hemisphere specificity was discussed and several right brain (intuitive) development exercises were performed.

Simonton's (1984) concept that all leaders are creative was stressed, as long as we were dealing with transformational leadership. Within this perspective the leader must be able to devise new meanings and propose new ways to the subordinates. To be able to do that he must be creative in the ways he sees things, people and events, as well as in ways of motivating others to task accomplishment.
The session also included the discussion of characteristics that differentiate segmentalist-mechanic organizations from integrative-organic ones. The parallel was established with military organizations and ways to overcome bureaucracy and resistance to change were discussed. The key points of the setting of an innovating climate within the participants' sphere of responsibility were stressed.

The session ended with the presentation of the film *Creativity*.

**COURSE EVALUATION**

In the last day both trainees and trainers evaluated the course.

**Participant's evaluation**

Through an anonymous questionnaire filled at the end of the course, participants were able to express their opinions about several aspects of the course. The filling of the questionnaire took place after a discussion with the instructors about the course and its implications.

The first and second questions asked them to list the themes that they had liked and disliked the most.

Opinions were very disparate, although there was some consensus on the lesser preference for concepts and definitions.

To the following questions, besides considering the course more or much more interesting than past courses of the same length, they found it
very or very much useful for their personal and professional lives. The course aspects that impressed them the most were the friendly approach of the instructors, team work and creativity.

They said that they had worked fair enough and that the course should have one more week of length. Written information handled to them was voluminous but necessary, although in English, (instead of being in Portuguese).

Final comment (Trainers evaluation)

The course was definitely efficient concerning the participant's knowledge increasing of facts, principles, methods and skills. In fact almost every issue was new to them.

Nevertheless, what we think really effective was the dimension given to the affective side of learning. The kind of approach held by the instructors was determinant to the association between the principles taught, the example given and the situation created within the group.

Beginning with a group in which backgrounds, expectancies, abilities, age, motivations and past career were so different to the point they seldom speak to each other, and ending up with a team of friends who learned to accept and take advantage of one another's differences was, in our opinion, the course's best achievement.

Besides the friendly and informal approach used by the instructors, play, hard team work and creativity were determinant in associating theory to example and practice.
Although we are positive about the need to review the course model concerning specific skills and abilities that should be practiced by the participants, and setting a whole block of tests for personality and cognitive assessment, the way attitudes changed and the setting of a proper climate for learning should be retained in future courses.

To allow for proper feedback (and because it was impossible to run a follow up on each participant after the course), a future meeting among both trainers and participants was set for six months after. The idea is to have the participants fill a questionnaire and to hold a discussion about which course aspects they think have remained as more permanent behaviors or attitudes. After that meeting a supplemental report will be issued.
DISCUSSION

The present leadership course was guided by a global purpose which was materialized in objectives.

The purpose was, obviously, to turn the 1st lieutenants into better military leaders. This is a very broad and indefinite statement. It seems necessary to stress how important for the trainers it was to turn to it when there were doubts or uncertainties about the objectives and when they faced difficulties in achieving them during the course.

The first objective was to build a group and to lead it in the accomplishment of specific tasks. We wanted to set an example and wanted the trainees to experience the transformation.

Team-building is an affective and active process. Its counterpart is the power-building by the leader.

Professor Pereira assumed the leadership, in a way familiar to the military. He was the most graduated in the group (formal-power) and the most distant. He was there all the time but would not participate in group work. He would only act by lecturing and by being available.

The lectures were not "class" lectures but coordinating expositions, introducing the objective, discussing the previous group-session advancements and listing what was expected to follow. It was a control-coordinating action.

In pedagogical terms the lectures were concept-centered. Attention was called for the relevance of conceptualizing what was being done and how the concepts could sustain learning.
When formal learning was needed to assure the progress to the next step, papers were distributed as home-work. The trainers and the trainees evaluation are coincident in which this objective was successfully accomplished. It should be recognized that it was sustained by a very careful preparation of the three trainers and that the previous experience with other leadership courses (see previous reports) was instrumental in setting the present plan of action.

A second objective was to demonstrate how the main three areas of leadership - social influence, negotiating and symbolic - require different approaches implying prompt flexibility of the leader's behavior, when the situation calls for it.

Social influence leadership was built in the role playing, negotiating leadership was the object of simulation exercises and symbolic leadership was dealt with in terms of a general discussion. (We hoped, to begin with cases reported by the trainees but half of the reports collected were not fit for that particular use).

In a social-influence training feed-back is indispensable. The basic idea was to give feed-back in the first instances and then to create the habit to look for feed-back without assistance.

In setting the training in this way we took profit of the experience of the two previous leadership courses. As it was expected the second step is more difficult to settle than the first one, and it became evident that a much longer period of time would be required to make it a real habit.

Anyway, it is a common observation that one of the reasons people are not good at influencing the others is due to lack of systematic attention to the effects of one's performance. In the circumstance, we paid close
attention to such occurrences and used them to demonstrate the use for this skill.

It is also a consistent result of a great many experimental outcomes that feedback on performance is a strong learning consistency. The trainees recognized the fact, welcomed the feed-back and began to pay attention to the effects on their own behavior. To make it a well stabilized habit would require a longer learning period used for a continuous working through.

The same principle governed the learning of other stills like for instance, negotiating.

In which pertains this specific aspect of leadership the main objective was, also, to fight against a well established social habit. People in general and the military in particular, tend to picture negotiation as a kind of small war. They consider it in terms of a zero-sum game, and a fair number of people feel obliged to always win. If they fail they feel inadequate or guilty or, at least, not fit for the leader's role.

On the contrary, a close look at the leadership process reveals that the kind of negotiation the leader should master is much more the logrolling type. As a conceptual model it is not ready and available in most social environments. The prevalent macho-image military like to attribute themselves does not help the needed conversion.

We were conscious, in this specific instance, as well as in most of the instances dealt with in the present course, that more than a change in attitudes a true "conversion" is required. In order to do that we tried to induce a strong dissonance both affective and cognitive, at the beginning of the negotiating exercises and to make later on, the connection with creative and innovative techniques.
It may be stated, with a reasonable reliability, that the approach was successful.

To deal with symbolic leadership is always difficult because, at the one hand it has a strong bearing on ethics, and on the other hand, circumstantial events are prone to polarize the trainees very strongly in unwanted directions. In the previous course the later happened. In the leadership course for trainers in the Marine School (previous project), a career problem affecting everybody present made it very difficult to turn the attention to more abstract questions. In the leadership course for Comando officers and sergeants it was the press coverage of a lethal accident which polarized everybody.

When we were running the present course the institutional problem of the moment was the eminent downsizing of the Portuguese Armed Forces.

In some way we discovered that the best approach to this nagging circumstantial event is to assume a quasi-psychotherapeutical attitude, rogerian, if you wish.

One has to let the trainees speak freely about the point or points of their actual concern before one tries to get to - what seems to us - the most pertinent questions.

By doing so, one sets the stage for the accomplishment of this particular objective. To "drill" directly at it is condemned to failure.

Another point to be retained, which we also learned during the course at the Marine School, is that the question of symbolic leadership cannot be avoided. If you forget it or try to manipulate the need for answers, you should be prepared to play an high price in terms of the trainees' lack of engagement in the course if not in terms of hostility.
The last may even happen at any point of the discussion. Nothing can substitute openness and acceptance of the trainees' opinion. Of course this is, again, an hard task for the trainers because they have to assume an infrequent attitude among the military.

In which pertains the results of the three courses and especially of the present one, the discussions of symbolic leadership turned to be a strong ingredient in favoring the effective link between trainees and trainers.

A third, and more straightforward objective, was to train specific skills, previously identified in the theoretical analysis of the previous reports and also in terms of our own previous experience, as relevant for a better performance as leader.

As it was detailed in the previous report, we followed a step by step model in which "to know the others" and "to know thyself" alternate as we move towards the end of the course.

In the beginning we asked for information about the trainees, having them speak about themselves, and then introduced the SYMLOG technique. In both cases when the information became public we invited them to think if the same categories could apply to increase the knowledge about their subordinates.

Afterwards we moved to train communication skills, insisting on feedback and performance evaluation, to contrast nominalistic appreciation of other's personality with the evaluation of their observed performance.

The question we introduced, at that moment, was that in order to develop thyself-your own perception skills- and then, the subordinates skills, it is better to use the nominalistic approach (e.g. he is sociable, reliable, etc) or the performance approach (e.g. when I instruct him to do something, 

23
does he comply, and in which way and with which degree of accuracy and consistency he does it?)

Although, puzzled at the start, the core difference between the two approaches finally became clear.

The same tactics were used when the attention was pursued in group processes and groupthink, as a special instance, of both communication and decision-making.

We noticed that at this point it would be very convenient to engage in a simulation exercise, like for example, an wargame. That we did not because it was not planned due to lack of time. (In our experience to take full profit of a war game, played under stressful conditions, would require a full week).

As referred above, the next step had to do with social influence skills, building up upon others skills already mastered.

The skills related to planning and taking action, were contextualized by the need for creativity and innovation in the leader’s behavior.

Finally, let it be recalled that our intention was to consider leadership under stress.

Stress was present all along the present course, in two ways. One was by simply referring to it in the lecture, the other was to introduce it in the exercises.

In the lectures stress was referred to by reporting our previous studies in the marines and also some parallel studies we did in Portuguese managerial leaders.
The introduction of stress in the exercises was done by limiting the time available and by always pressing with the work load, including, the multiplication of the homework, individual and group assignments.

It happened that in the evening before the last day, the trainees asked permission to have dinner at the Institute - and that required some deal of negotiating with the staff - and stopped working only at 02.00 AM.

The fact speaks for itself.
CONCLUSIONS AND RECOMMENDATIONS

The aim of the present research project is to construct a model course of leadership under stress.

In order to achieve the objective we build up upon our previous research on stress and leadership in marine units, and on experimental courses we organized.

The course rationale was presented in the previous report and the experimental course, which is described and discussed in the present one may be considered as a test of the hypothesis.

We consider, at present, that the actual model course may be generalized to other military contexts, and also to management in general.

Such a conclusion does not imply, on the contrary, that the model is context-free. For example, if the same model is applied to the U.S. Army, its specific context should be taken into consideration in all aspects from conceptualization and planning up to the pedagogical methods and the specific exercises to be worked.

One point is very clear. The Course should be tailored according to the rank and qualification of the subjects involved.

In the three experimental courses we had as trainees privates, corporals, sergeants, lieutenants, Army captains, and even one lieutenant-captain.

We clearly recommend, now, that trainees should be of the same rank and the same age group.

On the same line, we recommend that the course should be task-specific.
Combining the two recommendations above, we would favor that a
course following the present model should be restricted to the operational
level, that is to say, aimed at the military that face stressful situations
relevant to combat action.

People from other areas, like the administrative ones, showed more
difficulty in picturing in which way the course would be important to their
lives, than did the marines or the "comandos".

A combination of lectures and active-participating pedagogical
techniques seems to be ideal. The lectures should prepare and reflect upon
the active-participating techniques, but never substitute them.

Systematic knowledge should be restricted to a minimum in the
lectures. The results are superior when the needed information is assigned
as an homework.

The trainers are required also to do a lot of "homework". They must be
familiar with the scientific literature on stress, leadership and other relevant
areas of social psychology. Not to "teach" them, but to be able to answer in
a prompt and consistent way the questions put forward by the trainees. On
the other hand, to assume success a course based on the present model
requires a very detailed preparation, to the minimum detail of every session.

That should not imply that the plan is to be rigidly followed. To do that
could be a disaster in two ways, it may block the students progress and set
a bad example about what should be the leaders' action, when he or she is
confronted with an unexpected difficulty.

Much of what can be achieved with a leadership under stress course,
depends on affective transference and on the particular relationship
developed between the trainers and trainees at the personal and the group
levels. Trainers must do what they say; they are not preachers. If they discuss ethics, that should be done in an ethical way. If they teach team building, a team must result from the effort: at the course's close trainees and trainers should be a cohesive group.

Trainers have to be believed in order to be followed. Leadership is an art. Trainees should be, first of all, apprentices and, only after, students of a specific field.

If the trainer is a poor leader, independently of his scientific preparation, he or she can only induce poor learning.

A final recommendation. If possible a leadership course for officers should last three weeks. The last one should be prone as an extended and diversified wargame, in which all the previously discussed issues and skills are reviewed and reinforced in the desired way. Wargames and other simulations provide opportunities to induce stressful situations and to train the participants to overcome them. Thus skills required are to be developed mainly in the context of decision making processes.
FINAL NOTE:
WHAT CAN GO WRONG?
or A SMALL GUIDE TO TROUBLE-SHOOTING

1. Trainers must have a full capacity to discuss general psychology (including the psychophysiology of stress) and social psychology issues. A fair familiarity with ethics is also required. Additionally they must master the skills they teach and demonstrate them to the trainees.

   No trouble-shooting possible; only prevention.

2. The course should be planned up to very minute details, including the administrative ones.

   A full cooperation with the command is required. The commanding officer and his staff are to be fully briefed before the course and on a day bases while it goes on, to assure non-interference, even well-minded one.

   The trainers group act as a model of leadership for the trainees. Prevention is, then, the only way to assure the course positive impact.

3. When planning, be very careful with timing.

   If you run out of time, assume your fault and announce rescheduling (which should be done in the trainers' every day evaluation session). Be flexible and adapt the next day's planning.

4. Don't try to "teach psychology".

29
If you find, during the session, that the trainees are bored, or distract, or not following your at all, turn immediately to an example, if possible taken from one of the cases written by the trainees.

It works wonders.

5. Never use your formal authority to shut-up a trainee.

If he (*) assumes a declared opposition it is your fault. It means you have not introduced the issue in a way fitting the class.

Assume a quasi-therapeutical attitude. Let him speak his mind. Then, either the other trainees shut him up or you get a chance to reframe the discussion. If, and only if, you are experienced with socratic maieutics, use it. In general, never counter-attack stating your opinion against his opinion. You should know better. Sheer opinions are the stronghold of fools.

6. Be very firm with assignments.

If you assign some task you have to use it and make sure that trainees executed their job.

Never forget an assignment. That provides the trainees with a very poor model of leadership. Either, they learn it was unnecessary or that you are not giving them the attention they deserve. Keep yourself available to coach group and individual work and set high standards.

Detect your error in the trainers’ day session and make a fair statement first thing in the morning.

(*) We are not making use of “he” or “she” because of lack of experience with women trainees.
7. If the trainees get very engaged in one particular topic and ask you for more information, you should evaluate the time it will require to comply with the demand and how it interferes with your session plan and timing.

It is a poor resource to say that the topic will be discussed in the future.

Even if that is planned, you should say something at the moment, preferably, use an example. Never lie about this because you will get caught!

If the topic is not planned consider two hypothesis. Either the question is pertinent and you should deal with it, now or after (re-scheduling), or the question comes from sheer curiosity about the topic. If the latter holds, tell the class that you cannot comply with the request but that you will provide them with a paper or book chapter to read at home.

8. Sometimes trainees detect that you are telling them something opposite or at odds with what another trainer said.

That is prone to happen because it you plan this course up to every and the one word you are speaking along the lecture - fixed lecture model - you absolutely kill your course. You are expected to act according to a minute plan but not as a computer or as a robot.

Consider the problem. Is the detected divergence substantial or not, that is, only due to the trainee misunderstanding or contextualization of the issue. That may be dealt easily calling attention to the context.

If the divergence is substantial, perhaps you have to discuss it with the other trainer. In any case, consider this instance not as trouble but as an opportunity. Indeed, it may provide you with the best occasion to introduce or rearrange the ethical problem pertaining to symbolic leadership (always,
the most difficult part of the course for the trainers). How the freedom of opinion and the teacher's freedom in the class may be dealt in the context of the military organization, may launch you, naturally, to a profitable discussion about the leaders' freedom.

9. You can never be sure if a class exercise, even if planned very carefully, will work. Sometimes they do not. Be prepared. The class my drift to discouragement, boredom or even to foolplay.

Stop it before the worst happens.

Be humble. Acknowledge your mistake and ask the trainees why the exercise did not work. If necessary revert to lecturing about the topic. Or, go to no 10.

10. This is the last resort for any class problem you may face.

Call the supervisor in.

A leadership under stress course is a very delicate process, which deals with multiple levels of human behavior and interaction. It calls for a full network of concepts, decisions, practices and if successful involves strong affection. Its only natural that you may be caught in the net.

Do not struggle in vain. You'll only make your situation worst.

The situation is somewhat similar with family therapy where the therapist may become a puppet in the well established and damaging family game.

Family therapists always work under direct supervision made through the "looking glass". When in trouble they call the supervisor in or he or she comes in or his or hers own initiative.

32
In order to do the same in a course you have to make sure that the supervisor is there and available. That is part of the planning.

11. A final note to end the final note.

For the subordinates leadership is, above all, an affective following of a person who acts in between the dictator and the seducer. The leader is followed much more because people hate and fear him or her or love and feel loved by him or her, than because they reason they should follow him or her.

Beware of your affections during the course.

They may trap you or make you a model leader, and, of course, an excellent trainer.

Not to pay attention to feelings may force you to pay an higher price. Than to acknowledge your shortcomings. After all, all leaders are human beings.
MANAGING SITUATION INDUCED STRESS IN GROUPS OF MARINES

PROJECT SUMMARY AND DISCUSSION

The present project objectives were threefold:
1. To develop a systematic model of instructor/supervisor behavior (instruction course) based on previous research (contract DAJA-45-85-C-0036) and theory development.
2. To gather new data, to evaluate, apply and refine the model of leadership under stress.
3. To generate practicable guidelines for supervisors and instructors to manage group cohesion and situationally induced stress.

Such objectives, although pertinent for basic research on stress and leadership, were set in order to try to answer a practical and vexing problem.

In the future battlefield the number of stress reaction casualties is expected to outnumber, by far, all the other types of casualties. Group cohesion and leadership are two empirically tested ways to prevent, as far as possible, such undesired events, provided they are correctly managed in training and in action.

Group cohesion is not good per se, as stress is not bad per se. Both require adequate levels for each specific situation on which marines are called to act. To manage both is mandatory in the present and future armed forces. How to do it, requires a theoretical effort and empirical study.

There is empirical evidence that stress induced by military action affects both group and individual performance and effectiveness. Pereira (1974) found that in Portuguese marine units engaged, in Africa, in counter-guerrilla activities, the effects of stress could be moderated by high unit morale. To decide the relative weight of leadership and of group factors, Pereira and Jesuino (1982), in previous research
contract examined marine units, in present-day training conditions, and found moderator effects of leadership behaviors, speciality of their discriminating components. In order to counter-test such findings a training program for marine instructors (part of them African-war veterans) was set and it was determined that it works in decreasing the stress of the trainees and in increasing their efficiency and satisfaction.

The study of other populations, civil servants, firemen, etc. showed that results are somewhat different because of organizational and group cohesion problems (Pereira and Jesuino, 1987). It becomes, then, relevant to better evaluate the role of group factors in Marine units in relation to stress and leadership, so that practicable guidelines for supervisors and instructors can be generated.

The procedure calls for the use of several instruments, including critical incidents interviews with veterans, group observations under different situations, development of a practical manual for instructors and supervisors, its application in a course and evaluation of the group results.

In the previous contract we have already introduced a leadership training program to be followed by the instructors of the Portuguese Marine School. This program, which was applied to half the instructors, was intended to decrease the stress of the subordinates and to increase their satisfaction with the training, and to evaluate the relative weight of the group variables.

The results showed that such a program did influence the behavior and attitudes of the subordinates. This was an important outcome, because the instructors, to whom the program was applied, were generally considered good instructors, who nonetheless showed marked improvement.

Nevertheless, the course was structured, in some aspects, by trial and error. So, it seemed irrelevant to improve the results to create a model course of leadership under stressful situations, on systematic basis. In order to achieve such goal, we reviewed
previous results under the new set of questions, gathered new data in terms of group of variables and initiated a series of individual and collective interviews of African war veterans, still on duty, especially the ones involved in the actual instruction of marines, before we moved to experiment with new courses.

In a parallel way we tried to develop the theoretical basis of a model course of instruction specifically directed to military leaders acting in typical stress-bound situations.

Intermediary goals in the present project were to outline a instructor's manual and to set the most appropriate pedagogical procedures to use it.

Both should be tested in actual course situations.

Two courses were administered. For the sake of generalization to other military if not, also, to civilian situations, the first course had as trainers "Commando" officers and sergeants and the second Navy first lieutenants (including Marines).

New data

New data emerged from all the applied actions of the present project and especially from a quasi-experimental study during the escalation period which immediately preceded the Gulf War. At that particular moment it became very likely the involvement of Portuguese marines, and we wanted to test our previous conclusion that leadership behavior may increase or decrease experienced stress as it, respectively, decreases or increases social support.

Two situations were examined: The restructure of marine units downsizing and the anticipation of war intervention. The 14 members of the marines' special operations unit and two samples of an operational company (29) and of a security company (48) were the subjects. The situations examined were exercises in Portugal, Italy, the Mediterranean theater and the Gulf war theater.
The reorganization downsizing was expected to generate concern about task difficulty and general organizational uncertainty. The participation in exercises or war activities is clearly dependent of the anticipation of danger.

The results show a very considerable consistence, in which all variations are in the expected direction.

In which respects restructuring of the marine units, symptoms of stress decrease in intensity after reorganization is completed. On the contrary, organizational stress present mixed results. It decreases or stays the same for the units that are not affected and increases strongly in the units that suffered a process or merging. Such process created a drastic change in command and in the interpersonal relations, so it become by itself a new stressor.

The data pertaining to two exercises, in Portugal, Movex (May, 1990) and Fibex (June, 1990) show that stress levels raise in the last mentioned exercise (by far the most difficult), especially in the less discriminate leadership unit, in accordance to basic hypothesis.

As expected, satisfaction values also decrease from the routine situation to Fibex towards task, chief, and colleagues. Performance, on its turn is slightly higher in the exercise situation.

Control measures on the security battalion companies did not show, as expected, variation in time, which makes the above differences pertaining to the two units, more relevant.

Finally, when the subjects are confronted with possible future participation in either exercises in Portugal and Italy, or war action either in the East Mediterranean or the Gulf, the results for the stress, performance and satisfaction very clearly follow the same pattern of variation, both in terms of the attributed danger and performance of each situation and are dependent on the leadership style. (It is important to recall that
The leadership style diagnosis was not made by the subjects but by their immediate leaders.

The results clearly show that anticipated stress increases with anticipated danger and that anticipated performance decreases in the same direction. The same is the pattern for satisfaction.

**Interviews with African war veterans**

More than 15 years after the end of the war (1962-1974), it becomes difficult to get a representative sample, because a great lot of people are not in active service any more and the ones that are still in the Navy hold higher ranks which makes it difficult to give us candid informations.

We intended to conduct 50 individual interviews and a nonspecified number of collective interviews with the same subjects.

However, because of the downsizing process in the Portuguese Armed Forces, only 36 individual interviews and 3 collective interviews (with 8, or 6 participants) were conducted.

The subjects at the time of their first participation in the war were: 11 officers, 13 petty-officers and 12 ratings.

Quite all the subjects had no difficulty in characterizing the morale of their military units at the time of war but it is very hard to them to decide on the role of direct leadership on the morale.

But if we combine the information provided it seems that the important common factors are professional competence, ethical treatment, competence to make information available and conflict solving capacity.
Nevertheless when we confront the subjects with the above inference in the collective interviews, it becomes difficult to get a consensus. This may reflect differences in the subjects particular experiences in Guinea, Angola and Mozambique.

Quite all of the subjects agree that unit morale was very important to decrease experienced stress levels, but they had difficulty in establishing bonds between leadership behaviors and stress levels.

It became obvious that the veterans were insisting on the gestalt properties of the interpersonal situation, while we were trying to force them to analyze. Thus, we changed the strategy in order to grasp the holistic meaning of the message. The veterans were speaking about an affective bond between leader and follower and stressing the core importance of the following behavior.

Two principles may summarize what we learned:

The crucial phenomenon in leadership is to be followed. It is this relational behavior that counts. All other possible considerations are of lesser importance.

In order to be followed a leader must be believed. To be believed means, essentially, three things:

- The followers have no doubts about the leaders objectives and proposed action, i.e., what the group is expected to do.
- The followers have no doubts about the leaders capacities and skills to implement the group's successful action, i.e., the leader makes them believe they are capable and skilled, as a group, to reach the objective.
- The followers have no doubts about the legitimacy of the action, i.e., what is proposed by the leader is lawful and ethical.

The psychological implications of the above two principles were outlined in interim report 0006 (May, 1992).
Instructor's manual and pedagogical considerations

In report 0002 we presented the theoretical framework underlying a leadership manual.

We distinguished three kinds of processes: symbolic, negotiation and influence processes.

We also adopted the traditional tripartition in individual, group and task requirements, each one being approached in different sections. Each section was further subdivided in two sub-sections: in the first we summarized the main findings in the scientific literature. In the second sub-section we derived the major consequences of the knowledge for the leadership behavior, after dealing with the three aspects of individuals.

Some points of convergence were singled out:

- In spite of the differences there seems to exist a considerable consensus among the authors about the most general behavioral dimensions effective across various leadership situations.

- Task-oriented behavior and group-maintenance behavior are generally relevant aspects of leadership behavior. Effective leaders carry out whatever task-related behavior are essential in their given situation, and these may include such things as planning, organizing, coordinating, setting goals, clarifying subordinate roles, provide skill training, disseminating information, solving technical problems and facilitating work by obtaining necessary supplies and resources.

- Effective leaders also establish and maintain favorable relationship with subordinates by acting in a considerate, supportive manner and treating them fairly.

They also try to maintain group cohesiveness and cooperation at a level appropriate to the situation by engaging in team building and conflict management behavior.
- Attempts by the leader to influence and motivate subordinates directly, can be regarded as another general category of leadership behavior.

Effective leaders usually establish mutually beneficial relationships with peers, superiors and persons outside of the immediate setting where they operate.

- Representational behavior include acting as a spokesperson for the group, negotiating on behalf of the group, lobbying for resources, soliciting support and cooperation from other groups, carrying out public relations activities, maintaining contacts with people who are important sources of information, and performing alliances with influential people to promote and defend the group's vital interest.

Turning to the pedagogical principles which should govern the basic leadership course organization we considered, in report 0005, the need to set a system to evaluate each trainee's actual capabilities and latent capacities and which ones it is possible to train with some reasonable probability of success. As the course should be aimed at groups of subjects and not only one subject at a time, the pedagogical methods to be used have to be determined by a scale economy principle. Methods to evaluate group progress and individual progress are also required.

We considered both Hunt's (1991) and Boyatzis' (1982) outlines of leadership skills and tried to reconcile the skills approach to the gestalt approach.

Leadership, beyond all possible analysis, is an activity closer to creativity than with any other skill or set of skills.

In the same way as all analytic essays were unable to grasp the core of creativity the same can be stated about leadership.

We may train cognitive abilities, motor capacities, deal with complexity or decision skills, communication capabilities, etc, and let unchanged the core aptitude to lead men. That is why, not excluding particular training of leader capabilities, we have adapted a more interactionistic oriented model.
In general, an interactive model can be set as follows:

a) Diagnose other people capability;

b) Diagnose your own same capability;

c) Give feedback to others;

d) Retain your own feedback, corrected by the others reaction to c);

e) Plan training;

f) Implement training;

g) Give feedback about training;

h) Keep the training going until there is a good fit between you and your subordinates.

As a consequence:

- There is no need for a full exploration of leadership skills, much less for a complete listing of leadership skills. We are not interested in training each one of the skills, because we are not standing a summation model.

- The model is not context-bound (Portuguese or American; Comandos or marines, etc) nor level-bound (petty-officers and officers, etc).

- The model is procedural and interactive. It is not limited by specific skills and is not focused on the leader or on the subordinates but on what goes in between them.

- The model is creative. It allows for a lot of experimentation. That, in itself, may induce the discovery of the relationship between leadership and creativity.

A final pedagogical note was presented in report 0006, in which we distinguished, for didactic purposes, between knowledge, skills and qualities. By knowledge we understand what can be taught, by skills what can be developed, by experience and by qualities what is inborn but can only develop with experience.

Knowledge, skills and qualities are the basic components of leadership.

The methods used for training leadership aim, therefore, at:
- Transferring knowledge through reading, lectures, guided discussions, case studies, programmed learning and films.

- Developing skills and qualities through modeling, role playing, demonstrations, case studies, simulation and on-the-job training.

The training strategy should be a balanced variety to achieve the established objectives with the greatest simplicity and economy.

The final course rationale, preserved in report 0006, considered all the above discussed factors, but insists on the fact that military leadership has to assure readiness for combat action and that its crucial phenomena is the following of the leader's subordinates who believe in his objective capacities and legitimacy.

The key concepts - leadership, small groups task and stress - are envisaged in terms of three interfaces: leader-society, leader-military organization and leader-group.

A step-by-step approach is proposed, including:

1) Know your men. 2) Know "thysel". 3) Consider leadership. 4) Developing the subordinates. 5) Developing "thysel". 6) Group process. Team building. 7) Leadership behavior. 8) Planning action. 9) Taking action. 10) Evaluation.

Experimental courses

Two experimental courses were conducted, one at the Portuguese Comandos Regiment, in the Spring of 1991. (report 0005) and the other at the Portuguese Navy Higher War Institute, in the Summer of 1992 (present report). Some shortcomings of the first course were corrected in the second, which constituted an experimental test of the hypothesis generated by the actual research project.
The first pedagogical experiment to create a formal leadership course took place in the Portuguese Comandos Regiment, Amadora, Portugal, in the Spring of 1991. It consisted of 14 sessions, with a total of 29 hours of instruction.

The 14 trainees were recruited on a totally volunteer bases, and their ranks ranged from first sergeant to captain.

The main aim of the course was to experiment with pedagogical methods.

The aim was twofold. First, we wanted to determine which was the best hierarchical level to train field leaders, second, what were the best didactical methods to train the subjects.

The procedure turned out to produce more problems than it solved. Indeed, it is preferable to deal with a homogeneous group of subjects. Perhaps we need to have different levels of leadership courses according to the rank of the military involved. The basic principles and the theoretical models may be the same, but their transposition to concrete didactical techniques has to be contingent upon the academic background and practical problems faced by each hierarchical rank.

Another vexing problem was the intermittent nature of the course plan. We hoped to conduct two sessions per week but circumstantial reasons interfered with our intentions. Anyway, the findings were concordant with our previous theoretical deductions and results.

This particular experience was instrumental in setting the final course for subjects of the same age group and background and to favour interactive pedagogical methods in a full-time, intensive schedule.
CONCLUSION

As it may be appreciated from the previous summary and the present report the building up of a leadership course fit for the military, that are prone to deal with unavoidable stressful situations, is not susceptible of ready-made recipes.

Although war or exercise situations have a great deal of communalities over time, place and the people involved, training is always context bound and should respect the subjects' formal power and background.

The principles outlined in the present report may be generalized to apply to courses in very different contexts, but, it should not be overlooked, that in order to be effective any course has to be grounded on the trainees' personal experiences and expectations. That means that any new course should be planned anew and never transposed from situation to situation on a mechanical way. As a consequence the trainers' training and planning must be always a creative activity which should be flexible enough to accommodate for unexpected course events.

Part of our effort in the present research was aimed at experimenting with a diversity of situations and persons and to develop resources to deal with the real problem any trainer way face in similar endeavors.