COHESION AND MOTIVATION: MULTI-NATIONAL EFFORTS IN THE
ARMED FORCES (U) ARMY HEALTH CARE STUDIES AND CLINICAL
INVESTIGATION ACTIVITY F... A D MANGELSDORFF ET AL.
UNCLASSIFIED JAN 85 HCSD-85-001 F/G 5/10 NL
Cohesion and Motivation: Multi-National Efforts in the Armed Forces

A. David Mangelsdorff, Ph.D., M.P.H.
MAJ James M. King, Ph.D.

Consultation Report #85-001

January 1985
NOTICE

The findings in this report are not to be construed as an official Department of the Army position unless so designated by other authorized documents.

Regular users of the services of the Defense Technical Information Center (per DOD Instruction 5200.21) may purchase copies directly from the following:

Defense Technical Information Center (DTIC)
ATTN: DTIC-DDR
Cameron Station
Alexandria, VA 22304-6145

Telephones: AUTOVON (108) 28-47633, 34, or 35
Commercial (202) 27-47633, 34, or 35

All other requests for these reports will be directed to the following:

US Department of Commerce
National Technical Information Services (NTIS)
5285 Port Royal Road
Springfield, VA 22161

Telephone: Commercial (703) 487-4600
**Cohesion and Motivation: Multi-national Efforts in the Armed Forces**

**Final Report - January 1985**

**A. David Mangelsdorff, Ph.D., M.P.H.**  
**MAJ James M. King, Ph.D.**

**Health Care Studies and Clinical Investigation Activity, Health Services Command, Fort Sam Houston, TX 78234**

**January 1985**

**49**

**Approved for public release; unlimited distribution**

**Cohesion, National Programs, Military Units, Interrelationships, Morale, Motivation**

The purposes of the symposium were: 1) to present some of the current research on morale, motivation, and cohesion in military units, and 2) to examine particular programs in the Armed Forces of the United States, Canada, Israel, and Germany. National programs, viewed with respect to the uniqueness of the cultures and societies, and how the nations develop motivation and morale of their personnel, are discussed. 

**DD 1473 EDITION OF 1 NOV 65 OBSOLET**
Commanders have recognized the interrelationship between the individual soldier and his peers. The military forces of each nation develop different strategies to strengthen the cohesion of their military units. The purposes of this symposium will be: (1) to present some of the current research on morale, motivation, and cohesion in military units, and (2) to examine particular programs in the Armed Forces of the United States, Canada, Israel, and Germany.

A. David Mangelsdorff, Ph.D., M.P.H.
Symposium Chairperson
TABLE OF CONTENTS

Disclaimer................................................................................................................. i
Report Documentation Page....................................................................................... ii
Preface....................................................................................................................... iii
Table of Contents...................................................................................................... iv
List of Participants.................................................................................................... v
Symposium Introduction - A. David Mangelsdorf.................................................... 1
Presentations:
  Tony Mangiardi and Adie McRae
    Cohesion Technology and Military Unit Cohesion
    Within the United States.................................................................................... 2
  Elizabeth E. Yoest and Trueman R. Tremble
    Impact of Cohesion on Leader Behavior-Outcome
    Relationships..................................................................................................... 6
  Frederick J. Manning
    Pluses and Minuses of Unit Cohesion: Some
    Hypotheses Based on Observations of Army
    Special Forces.................................................................................................... 15
  Reuven Gal and Frederick J. Manning
    Correlates of Unit Cohesion and Morale in the
    US and Israeli Armies..................................................................................... 16
  Reg T. Ellis
    Toward a Conceptual Framework for the
    Military Socialization Process......................................................................... 22
  Friedrich W. Steege
    Cohesion and Motivation in the German Federal
    Armed Forces................................................................................................... 34
  James M. King
    Symposium Discussion......................................................................................... 38
  Distribution List..................................................................................................... 43

iv
LIST OF PARTICIPANTS

Chairperson:

A. David Mangelsdorff
Health Care Studies and Clinical Investigation Activity
Health Services Command (ATTN: HSHN-T)
Fort Sam Houston, TX 78234

Participants:

Tony Mangiardi and Adie McRae
Soldier Support Center, Soldier Advocacy Directorate
Fort Benjamin Harrison, IN 46216
Title: Cohesion Technology and Military Unit Cohesion Within the United States

Elizabeth E. Yoest, Federal Aviation Administration, and Trueman Tremble, US Army Research Institute for the Behavioral Social Sciences
5001 Eisenhower Avenue
Alexandria, VA 22333
Title: Impact of Cohesion on Leader Behavior-Outcome Relationships

Frederick J. Manning
Division of Neuropsychiatry
Walter Reed Army Institute of Research
Washington, DC 20307
Title: Pluses and Minuses of Unit Cohesion: Some Hypotheses Based on Observations of Army Special Forces

Reuven Gal and Frederick J. Manning
Department of Military Psychiatry
Walter Reed Army Institute of Research
Washington, DC 20307
Title: Correlates of Unit Cohesion and Morale in the US and Israeli Armies

Reg T. Ellis
Canadian Forces Personnel Applied Research Unit
4900 Yonge Street, Suite 600
Willowdale, Ontario M2N 6b7
Canada
Title: Toward a Conceptual Framework for the Military Socialization Process
LIST OF PARTICIPANTS (CONTINUED)

Friedrich W. Steege
Ministry of Defence - PII 4
Posfach 1328
D-5300 Bonn 1
Federal Republic of Germany
Title: Cohesion and Motivation in the German Federal Armed Forces

Discussant:

James M. King
Health Care Studies and Clinical Investigation Activity
Health Services Command (ATTN: HSHN-H)
Fort Sam Houston, TX 78234
Symposium Introduction

Cohesion and Motivation: Multi-national Efforts in the Armed Forces

A. David Mangelsdorff
United States Army
Health Care Studies and Clinical Investigation Activity
Health Services Command
Fort Sam Houston, Texas 78234

Military commanders have long recognized the importance of the interrelationship between the individual soldier and his peer group. The bond between the individual and his group helps both to determine the soldier's willingness to fight for his group and to protect the soldier against psychological breakdown in combat. The purposes of this symposium will be:

1) to present some of the current research on morale, motivation, and cohesion in military units; and

2) to examine particular programs in the Armed Forces of the United States, Canada, Israel, and Germany.

Selected individual programs in the United States are being conducted at: Walter Reed Army Institute of Research, the United States Army Institute for the Behavioral and Social Sciences, and the Soldier Support Center. The individual programs in the United States are testing concepts with origins in regimental systems and earlier conflicts. Similar efforts are underway in the Federal Republic of Germany, Canada, and in Israel. The individual programs must be examined in the context of national and international situations.

The national programs in the Federal Republic of Germany, in Israel, in Canada, and in the United States must be viewed with respect to the uniqueness of the cultures and societies. How the nations support their Armed Forces in terms of manpower acquisition, retention, budget, and political involvements affect how the Armed Forces develop the motivation and morale of their personnel. Faced with declining birth rates, narrowing financial resources, and increasing requirements for education and training, the military must compete for its resources with the rest of society. Adding the international context further complicates military problems. Multi-national cooperation toward sharing experiences in this area has become critical.
Cohesion Technology and Military Unit Cohesion
Within the United States Army

Adie McRae and A.R. Mangiardi
Soldier Support Center, Soldier Advocacy Directorate
Fort Benjamin Harrison, Indiana 46216

The Emergence of Military Unit Cohesion as a Concept

The United States Army began the systematic study of cohesion in the late 1970s. Initial efforts were primarily directed toward what has since come to be termed "horizontal cohesion," i.e., the bonding of group members to the group. The dimensions of this kind of cohesion, or solidarity, are fairly well documented within the research literature. It is evidenced, for example, by stronger adherence to group norms, positive affect for fellow group members, and strong identification with the group.

In the early 1980's impetus was given to the study of cohesion within a military context through the command emphasis of General E. C. Meyer, then the Army Chief of Staff. He initiated major structural changes in the personnel replacement system, in the quest for greater military cohesion. The individual replacement system for certain combat units became the company replacement or "New Manning System." This concept involved the formation of companies with a limited unit life cycle of three years. Personnel would be assigned to these units and remain with them over the entire life cycle, thus, they would have sufficient time and opportunity to become identified with each other, a base station and a regiment. Stability and predictability, it was thought, would appreciably enhance the environment in which cohesion, and improved performance would develop. Companies which were so structured were called Project COHORT (Cohesion, Operational Readiness and Training) units.

It was within this context that the concept of "military unit cohesion" was developed which emphasized bonding among group members which was directed toward heightened resolution, commitment to the unit, the unit members, and the unit mission. Military unit cohesion also included the concept of vertical bonding among members of the chain of command—the relationship of reciprocal respect, trust, caring, and confidence between leaders and subordinates. Military unit cohesion was viewed as a dynamic interaction of factors to include both vertical and horizontal bonding.

Steps were taken to operationalize studies and research conducted both within the Army (WRAIR, ARI, SSC), and the civilian scientific community, in order to effectively implement the technology of cohesion. The application of "Cohesion Technology," as the effort has come to be termed, remains an ongoing effort with many elements of the Army contributing. The meaning of the term "Cohesion Technology" refers to planned efforts, methods, and procedures to enhance or maintain military cohesion. Soldier Support Center has published two documents with the objective of defining doctrine and providing leaders and trainers with "how to" material to implement cohesion technology. These publications are: (1) DA Pamphlet 350-2: Training, Developing, and Maintaining Unit Cohesion (June 1982), and (2) Final Draft FM 22-8: Military Unit Cohesion (May 1984).
Evaluation of the NMS continues as does extension of the COHORT concept from companies to larger units. A training support package based on problems uncovered through field analyses and lessons learned is being developed.

Toward a Training Program for COHORT Leaders

Introduction

The COHORT system, the company level application of the US Army's New Manning System (NMS), can be viewed from various perspectives. It is clear that the personnel management system can benefit from COHORT in terms of increased administrative efficiency, but more important are implications for an improved environment for effective training and the provision of fertile ground for the development of cohesion. The concept includes satisfaction features, i.e., stability and predictability of assignments. Initial performance reports have been generally favorable in terms of reenlistment rates and unit performance.

The human dimension, always important to Army leadership, became of particular interest within the context of COHORT units. The interest was based on the observation that some COHORT soldiers, especially mid-level NCOs, might be experiencing difficulty in adapting to, or possibly, accepting, NMS.

Army Research Institute (ARI) and Soldier Support Center (SSC) were asked to work together in studying this issue and to determine if problems did, in fact, exist. Soldier Support Center was further asked to participate with other training and doctrine command (TRADOC) schools (Infantry, Armor, and Artillery) to address problems in implementing the New Manning System through a comprehensive training strategy. The training strategy was to include both technical/tactical and human dimension components.

Concept and Procedures

The method chosen to study these issues was the survey approach. Both leaders and first term soldiers were included in the survey. The survey was designed to compare NMS and individual replacement system units with regard to attitude toward specific NMS issues. Comparisons were also planned among installations, rank/duty positions, and among various points in the unit life cycle.

The survey content was limited to nine areas which represented major points of difference between NMS and individual replacement system units. These content areas included life cycle characteristics, leadership considerations, stability and career issues.

A total of 21 units on three installations were surveyed. Fifteen of these units were COHORT units at various stages of their life cycle and six were individual replacement system units.

Findings and Applications

Survey data are currently being analyzed and interpreted by the Army Research Institute. Therefore, no findings are available at this time. Still, some initial trends and some implications for immediate use in formulating training are available.
COHORT leaders were significantly more likely to report a general perception that career opportunities were more limited than their peers in non-NMS units. This included promotion opportunities, the opportunity to change career fields, installations, and units. In addition they reported the perception of a greater workload, and of not being initially accepted into their battalion. They also reported a perception that COHORT leaders "really care" about the welfare of their soldiers.

In terms of implications for training, four major areas of concern were identified. These are: (1) tactical and technical skill training, (2) knowledge about the NMS, (3) leading cohesive troops in a stabilized environment, and (4) skills in dealing with each other and with first term soldiers, i.e., human relations.

Combat Army schools are addressing the first area through an intensive two week training program which covers basic tactical and technical skills. All unit leaders will be included in this program. This training will be conducted prior to the reception of the new first term soldiers from the training base. It may include meeting and working with the first term soldiers on an FTX or other exercise. New skills will be taught, and refresher training will also be conducted for the leaders. This time will offer an opportunity for the leaders to engage in a shared experience, and to build a working knowledge of individual and team strengths and weaknesses.

Soldier Support Center is addressing the remainder of the areas of concern through an exportable program of information and practical exercises which will involve approximately 20 hours of formal instruction and a series of feedback/progress report sessions. These sessions will be conducted by the battalion and company staff with assistance from installation resources, such as the Organizational Effectiveness Staff Officer, Chaplain, and Division Psychologist. Information on the NMS, and its implications for individual career patterns will be included. Emphasis will be placed on clear statements of unit mission, standards and goals. Other components will address dealing with peer pressure, developing horizontal and vertical bonding among leaders and first termers, basic counseling skills and techniques, and practice in giving and receiving feedback to others in an effective way. Throughout the importance of soldier welfare, i.e., caring for soldiers, will be emphasized. One goal of SSCs program is to be responsive to the stated needs of COHORT leaders. Another goal is to help create a supportive climate for the development of team work and cooperation among the unit leaders. It is anticipated that SSC's contribution will help to build an atmosphere of enthusiastic participation in unit affairs, help to foster innovation and intrinsic motivation and help to develop a sense of identification and commitment to the unit and the unit's mission.

Implications and Conclusions

The SSC program is a "living" program. It will change as needs and/or new findings dictate. It is hoped that eventually performance and cohesion might be operationally defined, and data correlated in some useful fashion. Evaluation procedures currently being developed could be the basic foundation for a unit "morale/performance" feedback system along the lines of those already in operation in other Armies--most notably, the Israeli Defense Force. Our efforts thus
far have been only a small contribution. With persistent and dedicated follow through, this emphasis on training could represent a useful and visible application of behavioral science toward improving our readiness and better equipping our soldiers for success.

Discussion Questions

1. Is it possible to make headway in the development of military cohesion in a bureaucratic Army (i.e., where the standards, values, structure and status systems are largely pre-established and in place, and personnel are seen as space fillers)?

2. Can we develop general cohesion technologies that would be largely culture free, or is it necessary to tailor the technology to fit the culture and mentality of particular soldiers, or particular groups of soldiers? Corollary questions based on ethnic, economic, racial, and other groupings can also be raised.
Impact of Cohesion on Leader Behavior-Outcome Relationships

Elizabeth E. Yoest, Federal Aviation Administration
Trueman R. Tremble, U.S. Army Research Institute for the Behavioral and Social Sciences
Alexandria, Virginia

This study is based on data collected to evaluate a program which was initiated to increase cohesion in military units. The data were analyzed here to test the hypothesis that the cohesiveness of the members of an organization moderates relationships between leader behaviors and organizational outcomes.

METHOD

Subjects and Procedures

Questionnaire data were collected from 2274 first-term soldiers in 39 units participating in an evaluation of the test program. All were U.S. Army, company-size, combat arms units. Of the units, 20 were test units, and 19 served as controls. Data in each test unit were collected by an evaluation team after the unit had completed a defined period of training and testing. Data in control units were similarly collected at calendar times yoked to the end of training of the test units. However, control units had not necessarily completed a defined period of training and testing. Since analyses had indicated few significant differences between the test and control units, they were treated as one sample in this study.

Measures

For the subjects in test and control units, separate factor analyses had been performed on responses to the 85-item questionnaire used to evaluate the program. Scales with common meanings had emerged for the test and control subjects. The analyses here were performed on the scale scores (arithmetic mean of items in a scale). All scale values were on a five-point continuum, with numerically higher responses representing more positive perceptions or opinions.

Cohesiveness was measured by three scales. One was an overall indicator of attraction to an organization in terms of its reverse, resistance to leaving it. This measure combined perceptions of the likelihood of own and other soldiers' rejection of an offer to transfer to another unit. The other two scales measured cohesion in terms of evaluations of the quality of work relationships and interpersonal closeness of soldiers in a unit. Quality of work relationships combined responses to six items about how well unit members were perceived to: do their jobs, perform in training settings, perform as good soldiers, work as a team, work hard to get the job done, and make each other feel like doing a good job. Interpersonal closeness combined responses about liking, caring about what happens to, and trusting other unit members with whom a soldier worked.
The factor analyses produced scales for two forms of leader behaviors, people-oriented and task-oriented. The items in both scales elicited ratings of the leader (non-commissioned officer) with whom a soldier worked most closely. The people-oriented behavior scale combined perceptions about the extent to which the leader was perceived to have: listened to and cared about problems of soldiers seeking help, understood guys in the unit, helped people solve their problems, and been available when soldiers wanted to talk. Task-oriented behavior rated the extent to which the leader was perceived to have done a good job, shown soldiers how best to perform their jobs, and made soldiers feel like winners when they had done well.

The questionnaire included five measures of outcomes. Three concerned satisfaction. These were ratings of: (1) a soldier's own adjustment (measured by items concerning own morale, improvement in opinion about the Army, usual mood, and overall adjustment to the Army); (2) unit morale (measured by overall morale in the unit, reasonableness of rules in the unit, and feeling that the unit is concerned about the soldier as an individual); and (3) satisfaction with own supervisor (one-item scale). The other two outcomes concerned self-rated performance or mission accomplishment. One measured perceived adequacy of training given to soldiers for the tasks required by their positions. The other measured unit effectiveness by a combination of perceptions about overall unit effectiveness, time required to make the unit combat ready, and the likely combat effectiveness of the unit.

Method of Analysis

The hypothesis was tested separately for each measure of cohesiveness. For each measure, units were formed into subgroups based on the level of cohesiveness in a unit. That is, the mean response of soldiers in each unit was computed for a measure of cohesiveness. Units were then divided into quartiles based on unit means. The units in the upper and lower quartiles were selected as the subgroups of units which were highest and lowest in cohesiveness. The hypothesis was tested with the responses of individual subjects in the highest and lowest subgroups. Partial correlational analyses were performed to determine the relationships between each leader behavior and the organizational outcomes when the effect of the other behavior is statistically controlled. Differences between correlation coefficients for subgroups were then tested for statistical significance. In addition, tests of differences in zero-order correlations of leader behaviors and organization outcomes were conducted for subjects within subgroups.

RESULTS

Cohesiveness of Subgroups

Table 1 summarizes the cohesiveness and sample sizes of the units forming the high and low subgroups for each measure of cohesiveness. As cohesiveness was measured with 5-point scales, mean cohesiveness tended to be neutral to moderately positive, respectively, in units in the low and high subgroups for two measures of cohesiveness, interpersonal closeness and quality of work relationships. Differences between low and high subgroups on these measures
approximated .60. Differences between low and high subgroups were relatively greater (about 1.20) when cohesiveness was measured by resistance to leaving. Cohesiveness tended to be neutral to moderately negative in the high and low subgroups, respectively. For all measures of cohesiveness, therefore, the low and high subgroups did not represent extremes.

Although treated as separate measures, the three measures of cohesiveness were not independent. First, there was considerable overlap between comparable subgroups formed by any two measures of cohesiveness. For example, seven of the nine units in the high subgroups for interpersonal closeness and quality of work relationships were the same. As Table 2 shows, the correlation between individual respondent's ratings of interpersonal closeness and quality of work relationships was moderately high \((r = .62)\). Resistance to leaving was somewhat less strongly correlated \((r = .30)\) with the other two measures of cohesiveness.

**Cohesiveness as a Moderator**

The partial correlations calculated within subgroups are presented in Table 3. Contrary to the hypothesis, group cohesiveness did not consistently moderate relationships between leader behaviors and organizational outcomes since differences between correlations in high and low subgroups were generally non-significant. This pattern of non-significance was obtained for all three measures of cohesiveness. For one outcome, however, support for the hypothesized moderating effect was obtained. That is, task-oriented leader behavior was more strongly associated with soldiers' own adjustment under conditions of low cohesiveness than high cohesiveness for two measures of cohesiveness (quality of work relationships and resistance to leaving). The other two statistically significant differences indicated in Table 3 are less noteworthy given the overall pattern of non-significant results.

Results for zero-order correlations (Table 4) also failed to provide support for the hypothesis. They indicate that compared to task-oriented behavior, people-oriented behavior tended to be more strongly associated with organizational outcomes related to satisfaction regardless of level of cohesiveness. This was particularly evident for unit morale and individual adjustment. This trend was also obtained for satisfaction with supervisor, but to a lesser extent. The other two outcomes were performance based, and the leader behavior orientations tended to be equally associated with them.

**Discussion**

Overall, these results do not support the hypothesis that group cohesiveness moderates relationships between leader behaviors and organizational outcomes. Two recent studies have supported such an hypothesis. Conceptual and methodological differences between this study and the past two suggest several reasons for the present lack of effect. Despite overall negative findings, the results emphasize the relative importance of leaders' people-oriented behaviors to attitudes related to organizational satisfaction.
In contrast to this study, Schriesheim (1980) and Tziner and Vardi (1982) found evidence for a moderating or interactive effect of group cohesiveness on relationships between leader behaviors and outcomes. Schriesheim found that group members' ratings of the structure initiated by their leaders were more strongly associated with the members' self reports of outcome attainment (that is, organizational performance and role clarity) when the groups were lower in cohesiveness. Perceptions of consideration behaviors were more strongly correlated with outcome ratings in groups with high cohesiveness. Tziner and Vardi found that performance effectiveness of military crews depended upon the fit between the leadership orientation displayed by crew leaders (based on combinations of task- and people-oriented behaviors) and the crew's level of cohesiveness.

When the present study is compared with those of Schriesheim and Tziner and Vardi, there are several identifiable factors that could account for the present negative findings. Three of these concern: group or organization size, specificity of leader behavior ratings, and the operationalization of cohesiveness.

Differences in the sizes of the groups studied are apparent. In this study, the cohesiveness of groups of 100 or more people was measured. The past two studies examined smaller groups, ranging from four to an average of seven. This difference in group size is related to the second difference, specificity of the leader rated. In both past studies, ratings were obtained for one leader (or supervisor) in each group sampled. In the present study, soldiers rated the leader with whom they most closely worked. Since there were several leaders in each unit, ratings of leader behaviors were aggregations of ratings for a varying number of leaders. Thus, both the aggregations and the leader objects actually rated likely varied on a number of dimensions across the 39 units sampled in this study.

With respect to the operationalization of cohesiveness, there are two formed subgroups based on the responses of already established group members to five items focusing on interpersonal attraction and quality of work relationships. Tziner and Vardi formed crews which were high and low in cohesiveness based on crew members' sociometric choices for team mates. The three studies also differed in the extremity of the high and low subgroups. In this study, high and low subgroups were represented by units that were, respectively, neutral and moderately negative on one measure (resistance to leaving) and moderately positive and neutral on the other two measures. In the past two studies, the high and low subgroups were both more extreme and more accurately characterized as high and low in cohesiveness. Moreover, neither Schriesheim nor Tziner and Vardi found differences consistently supporting their hypotheses when they examined subgroups with more moderate levels of cohesiveness.

Although this study did not confirm the moderator hypothesis, an interesting pattern was obtained for the relationships between outcomes and the two leader behavior orientations irrespective of level of cohesiveness. That is, both task- and people-oriented leader behaviors tended to be positively related to the satisfaction measures—adjustment, unit morale, and satisfaction with
supervisor. However, people-oriented leader behavior tended to bear a stronger association in all subgroups. This pattern of results adds to the weight of past evidence that people-oriented behaviors are especially important for achieving outcomes related to organizational satisfaction.

Performance-based outcomes tended to be equally associated with the two types of leader behaviors. This is also congruent with past research indicating that no single type of leader behavior is consistently related to group productivity.

References


<table>
<thead>
<tr>
<th>Descriptor</th>
<th>Units in Subgroups</th>
<th>Subgroup Descriptor Results</th>
<th>Subgroups</th>
<th>Subgroups</th>
<th>Subgroups</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Interpersonal Closeness</td>
<td>Quality of Work Relationships</td>
<td>Resistance To Leaving the Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Cohesiveness <em>x</em></td>
<td></td>
<td>2.99</td>
<td>3.66</td>
<td>3.17</td>
<td>3.79</td>
</tr>
<tr>
<td>sd</td>
<td></td>
<td>.06</td>
<td>.20</td>
<td>.13</td>
<td>.17</td>
</tr>
<tr>
<td>X n sampled per unit</td>
<td></td>
<td>60</td>
<td>57</td>
<td>74</td>
<td>62</td>
</tr>
<tr>
<td>Total sample n</td>
<td></td>
<td>532</td>
<td>515</td>
<td>694</td>
<td>558</td>
</tr>
<tr>
<td>VARIABLE</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td><strong>Cohesiveness</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Resistance to Leaving the Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Quality of Work Relationships</td>
<td>.30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Interpersonal Closeness</td>
<td>.30</td>
<td>.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Leader Behaviors</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. People Orientation</td>
<td>.31</td>
<td>.37</td>
<td>.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Task Orientation</td>
<td>.23</td>
<td>.25</td>
<td>.17</td>
<td>.52</td>
<td></td>
</tr>
<tr>
<td><strong>Outcomes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Soldier's Own Adjustment</td>
<td>.39</td>
<td>.41</td>
<td>.33</td>
<td>.41</td>
<td>.29</td>
</tr>
<tr>
<td>7. Unit Morale</td>
<td>.51</td>
<td>.48</td>
<td>.35</td>
<td>.48</td>
<td>.33</td>
</tr>
<tr>
<td>8. Satisfaction with Supervision</td>
<td>.31</td>
<td>.25</td>
<td>.17</td>
<td>.43</td>
<td>.37</td>
</tr>
<tr>
<td>9. Quality of Individual Training</td>
<td>.15</td>
<td>.29</td>
<td>.24</td>
<td>.19</td>
<td>.19</td>
</tr>
<tr>
<td>10. Unit Effectiveness</td>
<td>.34</td>
<td>.50</td>
<td>.35</td>
<td>.32</td>
<td>.26</td>
</tr>
</tbody>
</table>

**Note:** Intercorrelations and reliabilities based on total sample.  
* p < .05 for all correlations
### Table 3: Moderator Subgroup Partial Correlation Analysis Results

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Cohesiveness Interpersonal Closeness</th>
<th>Cohesiveness Quality of Work Relationships</th>
<th>Cohesiveness Resistance to Leaving the Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td><strong>PEOPLE ORIENTED BEHAVIOR</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of Individual Training</td>
<td>.09</td>
<td>.09</td>
<td>.07</td>
</tr>
<tr>
<td>Unit Effectiveness</td>
<td>.28</td>
<td></td>
<td>.23</td>
</tr>
<tr>
<td>Soldier’s Own Adjustment</td>
<td>.34</td>
<td>.34</td>
<td>.33</td>
</tr>
<tr>
<td>Unit Morale</td>
<td>.44</td>
<td>.34</td>
<td>.42</td>
</tr>
<tr>
<td>Satisfaction with Supervision</td>
<td>.33</td>
<td>.32</td>
<td>.29</td>
</tr>
<tr>
<td><strong>TASK ORIENTED BEHAVIOR</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of Individual Training</td>
<td>.12</td>
<td>.12</td>
<td>.11</td>
</tr>
<tr>
<td>Unit Effectiveness</td>
<td>.15</td>
<td>.06</td>
<td>.15</td>
</tr>
<tr>
<td>Soldier’s Own Adjustment</td>
<td>.13</td>
<td>.05</td>
<td>.18</td>
</tr>
<tr>
<td>Satisfaction with Supervision</td>
<td>.25</td>
<td>.19</td>
<td>.18</td>
</tr>
</tbody>
</table>

* p < .05 (two-tailed)

Note: p < .05 for all correlations = .06 or less.

For people oriented leader behavior, task oriented leader behavior was partialled out. For task oriented leader behavior, people oriented leader behavior was partialled out.
### Table 4: Moderator Subgroup Correlation Analysis Results: Zero order Correlations

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Cohesiveness: Interpersonal Closeness</th>
<th>Cohesiveness: Quality of Work Relationships</th>
<th>Cohesiveness: Resistance To Leaving the Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>People Orientation</td>
<td>Task Orientation</td>
<td>People Orientation</td>
</tr>
<tr>
<td><strong>LOW LEVELS OF COHESIVENESS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of Individual Training</td>
<td>.18</td>
<td>.19</td>
<td>.15</td>
</tr>
<tr>
<td>Unit Effectiveness</td>
<td>.41</td>
<td>.34</td>
<td>.35</td>
</tr>
<tr>
<td>Soldier's Own Adjustment</td>
<td>.45</td>
<td>.34</td>
<td>.46</td>
</tr>
<tr>
<td>Unit Morale</td>
<td>.55</td>
<td>.40</td>
<td>.52</td>
</tr>
<tr>
<td>Satisfaction with Supervision</td>
<td>.49</td>
<td>.45</td>
<td>.42</td>
</tr>
<tr>
<td><strong>HIGH LEVELS OF COHESIVENESS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of Individual Training</td>
<td>.18</td>
<td>.20</td>
<td>.15</td>
</tr>
<tr>
<td>Unit Effectiveness</td>
<td>.22</td>
<td>.17</td>
<td>.26</td>
</tr>
<tr>
<td>Soldier's Own Adjustment</td>
<td>.42</td>
<td>.27</td>
<td>.40</td>
</tr>
<tr>
<td>Unit Morale</td>
<td>.45</td>
<td>.34</td>
<td>.48</td>
</tr>
<tr>
<td>Satisfaction with Supervision</td>
<td>.46</td>
<td>.39</td>
<td>.43</td>
</tr>
</tbody>
</table>

* p < .05 (two-tailed)

Note: p < .05 for all correlations
The twelve-member "A-team" of the US Army's Special Forces (SF) have long been recognized as a likely standard by which to judge the cohesiveness of other Army units. The author was in fact frequently referred to the "Green Berets" by subjects of previous research on the health consequences of cohesion. Contact was finally initiated, however, by some high ranking SF staff officers who felt that intense unit cohesion was not providing the protection from stress predicted by both the wartime and the more recent social support literature, but was instead itself a major cause of marital and family problems. Interviews of soldiers and wives, along with extensive participant observation, both in garrison and on overseas training missions, verified the extreme cohesiveness of A-teams, and led to the following hypotheses about the consequence of this cohesiveness:

a. The desire for peer esteem frees these units from the everyday hassles of conventional units over who does what work, and produces a clear ability for independent, decisive, well-done work with a minimum of supervision by the formal chain of command.

b. Strong intra-unit bonds result in a happier, healthier soldier, less prone to disciplinary problems and more satisfied with the Army than peers in conventional units.

c. Intense unit cohesion often leads wives of team members to view the teams as their greatest rivals, a drawback compounded by the member's tendency to view this as a problem not for them as a couple, but for her as the wife of an SF soldier.

d. The ability of the teams to operate as independent units leads to strong resentment of attempts at control by higher headquarters as well as other failures to recognize them as special.

e. Realistic assessment and semi-official mythology producing strong pressure for a close "in-group" leads to a need for identifiable "outgroups" as well. The most readily available is the non-team Special Forces support troops known not too affectionately as "candy-stripers" because of their abbreviated unit insignia.

There thus appears to be some price to pay for the benefits of intense unit cohesion, a price which will need more and more consideration as we move further and further from an individual-based personnel system to a unit-based one.
Correlates of Unit Cohesion and Morale in the U.S. and Israeli Armies

Reuven Gal and Frederick J. Manning
Walter Reed Army Institute of Research
Washington, DC

The present paper is part of an ongoing study attempting to draw some comparisons between an all-volunteer, peacetime, Western Army and an all-conscription, semi-Western Army on full alert status. The comparisons focus on the concept, measurement and correlates of morale. We hope thereby to make some contribution to the parsing of this elusive concept into its essential core and its national and/or situational specializations. More specifically, the comparison may provide some empirical ground for the frequent assumption that the US Army can and should adopt and apply "lessons learned" by their Israeli counterparts in the area of soldier motivation and morale.

Our focus for this symposium will be on the role of cohesion, both "horizontal" (peer group relationships) and "vertical" (leader-lead relationships), in the morale of Israeli and American soldiers, as measured by self-report on a common survey instrument.

METHOD

Subjects: Data were collected from two sister squadrons of US Armored Cavalry for comparison to previously gathered Israeli data. The source of the latter was a sample of 1250 Israeli Defence Forces (IDF) enlisted soldiers assigned to combat units in the Golan Heights. These data were gathered by IDF field psychologists in May 1981, while the units were on alert, preparing for a possible operation against PLO terrorists operating from Lebanon. With these circumstances in mind, we chose a Germany-based Armored Cavalry Squadron (hence labeled USAREUR) as the U.S. unit most similar to the IDF sample in composition, mission and location. That is, such a cavalry squadron has a mixture of tank, mechanized infantry, and field artillery units; its peacetime mission is border reconnaissance; and it is located far from home, in a position to be among the very first combatants in the event of hostilities. Data from a sister squadron stationed in the U.S. (hence CONUS) were collected as a first step in assessing the generality of our conclusions beyond the border-location high-alert unit.

The target populations in each of these squadrons were all junior enlisted soldiers and their first line supervisors, squad or section leaders or tank commanders (no headquarters of support personnel were involved). Leaves, special details, schooling, and the like left us with usable questionnaires from approximately two-thirds (300) of this population in each case. We assume there was not sufficient bias in this unavoidable sampling to render our findings unrepresentative of the intact units.

Questionnaire: The Combat Readiness Morale Questionnaire (CRMQ) consists of 31 questions dealing with morale, cohesion, and readiness. Scoring was done via 5-point Likert scales. The CRMQ was translated into English in a process involving group-of-experts discussion and a translation back from English to Hebrew. This was initially done verbatim, but some of the items appeared so
culture-situation-specific that they would not be meaningful to American soldiers. Three referred directly to Lebanon/PLO terrorism issues and were subsequently omitted entirely from the English version. In several other cases an attempt was made to formulate a parallel item which tapped the relevant concept in a way U.S. soldiers could understand. Table 1 is the final product of this process. The questionnaire was administered to company-sized groups by the investigators during February and March of 1984.

RESULTS

For the purpose of this symposium, our analysis will focus on comparing the three samples in two ways: factor analysis of the questionnaire as a whole, and the correlations of the two cohesion items with the remaining questions.

Despite some national differences discussed below, factor analyses of the three samples were quite similar in their four primary factors, perhaps best summarized as reflecting leadership, small group, and individual facets of morale, with the individual further subdivided into professional and personal. The two American samples were nearly identical in the inner structure of each of these factors, and in the overall and relative amounts of variance explained by each. The IDF sample differed somewhat in the details of factor composition, and considerably in the percentages of variance accounted for by the individual factors.

Of special relevance to this paper is the composition of the "small group" factor, which is the first factor for each of the U.S. units and the third factor for the IDF sample. In all three cases, both the personal morale and company morale items load most heavily on this factor, along with the "horizontal" and "vertical" cohesion items (#24 & 25). These are the only four items with loading above 0.5 in the IDF analysis, while in both the U.S. analyses the items dealing with the company's combat readiness (#2), friends' readiness to fight (#4), and the unit's weapons (#3 and 20) also had high loadings on this factor.

The first factor for the IDF (accounting for over 50% of the common variance) and the second factor for the U.S. units was confidence in commanders (company and above). The second IDF factor was composed of equal mix of items topping self confidence (#8, 21, and 22) and items asking about familiarity with the expected mission and associated terrain. The U.S. units also showed a similar factor, though the data from the U.S. based squadron understandably emphasized self-confidence, and that from the German unit, mission and terrain familiarity.

The fourth factor in all three samples centered on items 26 and 27, which deal with worries about personal safety in combat. These two items were essentially uncorrelated with any other item in the questionnaire.

Looking at the data in more detail involves analyses and comparison of the inter-item correlations for each sample. In this paper we shall focus on correlations with the two primary cohesion items: Unit Togetherness (#24) and Relationships with Officers (#25). Cross-sample similarities in the pattern of inter-item correlations were assessed by first rank ordering the items on the basis of their correlation with each of the two cohesion variables, then
computing Spearman rank correlations (rs) between the sets of ranks generated for each sample. For Unit Togetherness the resulting figures were: IDF-USAREUR rs=.84; USAREUR-CONUS rs=.82; and IDF-CONUS rs=.69. Corresponding figures for Relationships with Officers were: rs=.74, rs=.71, and rs=.73. The basic patterns of item interrelationships is thus quite similar in each of the three samples, although the U.S.-based squadron appears somewhat less similar to the IDF sample than the Germany-based one.

Despite their general similarity, analysis of the item intercorrelations themselves identifies some interesting differences among the samples which not only reflect cultural or national influences, but also situational ones.

Unit Togetherness

As mentioned above, the present study reveals a strong relationship between unit morale and cohesion. In all three samples the Unit Togetherness (Item 24) was most strongly correlated with the company morale item (r=.46 for both CONUS and USAREUR; and r=.41 for IDF), even to a higher degree than the Relationships with Officers item, which ranked second for the IDF and CONUS samples, and third for the USAREUR sample. Unit Togetherness was also found, especially in the Israeli sample, to be closely related to the personal level of morale. Thus, regardless of the exact nature of the units involved in the present study, aspects of morale and cohesion were strongly interactive.

The Unit Togetherness variable was found to be strongly related to the Combat Readiness variable in the USAREUR and IDF samples (r=.46, second, and r=.25, fourth, respectively), but only minimally (in eighth place) in the CONUS sample. As in our previous analysis regarding the relationship between cohesion/morale (being higher among "border" units) it is also apparent that the relationship between cohesion/combat readiness is much stronger among units where such readiness is critical than units which are geographically combat remote.

Another interesting phenomenon is shown with regard to the Friends' Readiness to Fight item (#4) and its relationship to the Unit Togetherness variable. This item was strongly correlated with unit togetherness in both the American samples (r=.43 for CONUS and r=.38 for USAREUR), and very weakly correlated (r=.18) for the IDF sample. The explanation, it is believed, lies in the different characteristics of the two military institutions. Among the American units, which are all-volunteer units, there is a close association between the level of the bonding of the men and their willingness to fight (whether these two aspects are both high or low is beyond the scope of this discussion), while among the Israeli unit, where willingness to defend one's homeland is apparently taken for granted, it is not directly associated with the unit cohesion.

Relationships with Officers

The most noteworthy finding in all three samples, but most particularly in the two "combat" samples, is the strong association between the Relationships with
Officers variable and perceived company morale ($r = .48$ for USARLUR; $r = .47$ for IDF; and $r = .40$ for CONUS). If there were any doubts concerning the importance of relationships between soldiers and officers to the morale level of the unit, the present findings may dispel those doubts and also perhaps suggest the universality of such an association. It is interesting to point out, however, that in both the Israeli and American "combat" units the correlations between Unit Morale and Relations with Officers were even greater than those found between Unit Morale and Unit Togetherness. In the CONUS sample the reverse order was found. In other words, it seems that among front-line units the importance of what is sometimes termed "vertical" cohesion is perhaps even more critical to the unit morale than the "horizontal" cohesion.

CONCLUSIONS

a. Cross-national comparisons in morale measurements—if they are to include all relevant situations and circumstances—require an emphasis on functional rather than literal equivalence.

b. Notwithstanding some specific situational differences—the factorial structure of perceived cohesion and morale is quite similar in comparable U.S. and Israeli combat units.

c. Whatever the sample or the method of analysis—the cohesion items are the ones most closely associated with morale.

d. Proximity to combat threat seems to generate a closer association between vertical cohesion and unit morale. Such conditions also produce a strong association between horizontal cohesion and perceived combat readiness.

e. Cross-national differences also appear, specifically with regard to the relationships between horizontal cohesion and peers' readiness to fight, and with regard to the relative importance of confidence in senior commanders.
Table 1

Items constituting the CRMQ in their American translation

[NOTE: Items in brackets are the Israeli items which differed from the American items]

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>What is the level of morale in your company?</td>
</tr>
<tr>
<td>(2)</td>
<td>How would you describe your company's readiness for combat?</td>
</tr>
<tr>
<td>(3)</td>
<td>How would you describe the condition of your unit's major weapon systems (Tanks, APC's etc)? What kind of shape are they in?</td>
</tr>
<tr>
<td>(4)</td>
<td>How would you describe your friends' readiness to fight, if and when it is necessary?</td>
</tr>
<tr>
<td>(5)</td>
<td>In the event of combat -- how would you describe your confidence in your platoon leader?</td>
</tr>
<tr>
<td>(6)</td>
<td>In the event of combat -- how would you describe your confidence in your troop commander?</td>
</tr>
<tr>
<td>(7)</td>
<td>In the event of combat -- how would you describe your confidence in your crew/squad members?</td>
</tr>
<tr>
<td>(8)</td>
<td>In the event of combat -- how would you describe your confidence in yourself?</td>
</tr>
<tr>
<td>(9)</td>
<td>In your opinion, what is the probability that your unit will be in combat during the next year?</td>
</tr>
<tr>
<td>(10)</td>
<td>How would you describe your confidence in the tactical decisions of your Squadron Commander?</td>
</tr>
<tr>
<td>(11)</td>
<td>How would you describe your confidence in the tactical decisions of your Brigade Commander?</td>
</tr>
<tr>
<td>(12)</td>
<td>How familiar are you with the General Defense Plan (CDP) of your unit (in regards to) terrain?</td>
</tr>
<tr>
<td>(13)</td>
<td>How familiar are you with your unit's frontage (the terrain, location of friendly and enemy forces, etc.)?</td>
</tr>
<tr>
<td>(14)</td>
<td>How would you describe your confidence in the capability of the IDF to protect the country?</td>
</tr>
<tr>
<td>(15)</td>
<td>How familiar are you with the General Defense Plan (CDP) of your unit (in regards to) location of friendly forces?</td>
</tr>
<tr>
<td>(16)</td>
<td>How confident are you in the high command level of the IDF?</td>
</tr>
</tbody>
</table>

* Troop -- a Cavalry's company-size unit  
** Squadron -- a Cavalry's battalion-size unit
(17) How familiar are you with the General Defense Plan (GDP) of your unit (in regards to) location of enemy forces?
(no separate item in the Israeli questionnaire)

(18) How familiar are you with the General Defense Plan (GDP) of your unit (in regards to) expected missions?
[How familiar are you with the expected missions of your unit, in case you go into combat in the next few days?]

(19) How much of the time does your unit spend on useful training?
[How much of the time (throughout this alert period) does your unit spend on useful activities (training, practicing preparations, briefing, etc.)?]

(20) How much confidence do you have in your unit's major weapon system (tanks, APC's, etc.)?

(21) How would you rate your own skills and abilities as a soldier (using your weapons, operating and maintaining your equipment, etc.)?

(22) In general, how would you rate yourself as a soldier?

(23) In general, how would you rate the Warsaw-Pact soldiers?
[In general, how would you rate the Syrian and PLO soldiers?]

(24) How would you describe your unit togetherness in terms of the relationships among its members?
[How would you describe your unit togetherness in terms of its interpersonal relationships?]

(25) How would you describe the relationships between the officers and the men in your unit?

(26) To what extent do you worry about what might happen to you personally, if and when your unit goes into combat?
[To what extent do you worry about what might happen to you personally, if your unit goes into combat in the next few days?]

(27) How often do the soldiers talk to each other about these worries?
[How often during the alert period do the soldiers talk to each other about these worries?]

(28) How often do your leaders talk to their troops about possible wartime issues?
[Did your leaders talk to their troops about the current situation?]

(29) How much stress do you typically undergo because of separation from family/wife/girlfriend due to field training?
[Since your mobilization to this present location, have you managed to phone home?]

(30) How much of a contribution do you feel you are making to the security of the United States by serving in the Army?
[To what extent do you believe that there is a real need and justification to go to this war?]

(31) What is the level of your personal morale?
Toward a Conceptual Framework for the Military Socialization Process

MAJ Reg T. Ellis
Canadian Forces Personnel Applied Research Unit
Willowdale, Ontario, Canada

Introduction

The purpose of this paper is to discuss a number of ideas concerning the military socialization process. One of the recommendations in Mullin's review of attraction literature, which we reviewed during our UTP-3 Meeting in 1983, concerned the need for a theoretical model of the attraction process. During our discussion of the paper, I put forward the idea that, while there was such a need, a model of the full military socialization process, of which attraction is only a part, is just as urgently needed. This was based on the notion that it is quite conceivable to achieve an understanding of the attraction process that would enable us to enroll as many of the right kinds of people as we need (through incentives, advertising, initial training strategies, etc.), but still fail to retain them or to properly motivate them in later career stages, possibly as a result of just those things we used to attract them in the first place.

Since that meeting, I have been working on a number of ideas, which I initially called, a "model" of military socialization. The term "model" implies the ability to capture the structure of the process it describes in some schematic form, which ought to reflect all of the elements and inter-relationships involved. Having repeatedly tried and failed to generate such a visual schema, I have adopted the more nebulous term "conceptual framework." The reason for this is that it has recently struck me that what I am attempting to do is to develop a number of linking concepts which will hopefully allow the integration of a number of models related to different phases of the military personnel process. Shields, for example, is scheduled to report on work devoted to building an attraction model. Jacobs and his researchers are developing a training/socialization model for the first enlistment term. Sarason's research efforts of "self-efficacy" with Marine Corps recruits and instructors is another example of such work, while Pinch has done research related to the retirement phase.

My strategy for attempting this rather ambitious task is to present what I believe may be a few of the key concepts and definitions within such a framework. There are certainly others, and it is my intention to elicit your help in refining and adding to these concepts with a view to building something which we may all eventually be able to put to use. In doing so, I will attempt to indicate some of the places where current and past research, such as the examples just cited, might fit.

Additional Background

Many of the ideas that have occurred to me in this context derived directly from my involvement in the recent NATO symposium on Motivation and Morale. It might be useful, therefore, to provide some background on this symposium.
The symposium was structured on the basis of three motivational phases within a military "career": the motivation to join the military; the motivation to remain in the military during and beyond the first term; and the motivation to engage in, or in support of, combat operations. The sequential interdependency of these phases—the idea that the motivational objectives of each phase must not only be achieved, but achieved in a way which is consistent with the achievement of the objectives in each of the following stages—formed the central notion which led eventually to other related concepts. These concepts are discussed in the following sections.

The Personnel Production Process

The first of these concepts is what I have termed the "personnel production process," which represents the sequence of career stages which lead up to the production of organized bodies of troops, who are both willing and able to fight. The ultimate objective of this process is "operational effectiveness," which is the criterion against which the outcomes of the sub-processes in each of the stages of the overall process must ultimately be evaluated. The stages of the personnel production process are: recruitment; basic (recruit) training; individual skills or trades training; collective training; peacetime deployment (maintenance of readiness); and wartime operations in, or in support of, battle.

These are directly analogous to the sequence of motivational stages represented in the three major sessions of the Motivation and Morale Symposium: motivation to join the military; motivation to remain in the military; and motivation to engage in combat. Each phase of the personnel production process, and thus the corresponding stages of motivational development, leads logically to the next, with the successful achievement of the objectives of each stage being dependent on the success of preceding stages.

These stages are depicted in Figure 1. I have included an additional stage, "pre-recruitment," for reasons which will be apparent a little later on. The three motivational phases are also depicted as brackets encompassing adjacent stages of the personnel process. Note that the brackets overlap to a certain extent, indicating that while they are generally sequential, one is not necessarily complete before issues related to the following stage begin to emerge and become more salient. Note also that if the second last-phase, denoted "readiness maintenance" in the diagram, was to be removed, a relatively simple and linear conceptualization of the process would result. However, this would be applicable only in times of war when a straight-line personnel process, leading directly from enrollment to operational deployment, might pertain. In our current reality, that is to say in peacetime, the process is much more complicated because it turns aside somewhere short of operational deployment in battle, and in a sense, iterates back upon itself. The efficacy of the various motivational and training mechanisms within the personnel production process is thus, under peacetime conditions, not tested against the ultimate criterion of battle effectiveness.
One might conceive of the best approximation of operational effectiveness as being "operational readiness." Some definition of this term is typically used to define the peacetime objective of the personnel process. In peacetime, individuals and units cycle through various stages of development of readiness. Individuals reach a certain stage in their personal development, and units reach an analogous stage in their organizational life cycle, when it is necessary to reassign or redeploy them for the wide range of organizational, administrative and professional development reasons which govern personnel mobility. It is for this reason that the inclusion of the "readiness maintenance" box makes the process much more complicated.

However, there is a danger which can arise from the use of an inappropriate definition of readiness. This definition must include some element of willingness of individuals and groups to perform their real operational function or mission. Simply having enough weapons, and enough people of the right rank and years of service who have had the training to operate them, is not an adequate definition of readiness, since, it must be remembered that an effective (or "ready") force is one which can and will fight. The point here is that a personnel system which has motivated enough people to join, and socialized enough of them to motivate them to remain in the service under peacetime conditions, but has failed to instill in them the willingness to fight, cannot be considered to be a successful system. This issue is discussed further in the section headed "Cost/Benefit."

Role and Role Acquisition

The second element of the model is the concept of "role acquisition." I have adopted the view that each phase of the personnel production has associated with it a number of social roles. A role is defined as a set of values and associated norms, appropriate professional and social behaviors, and expectations. All of these role components should be consistent with the achievement of organizational objectives.

The roles associated with each stage of the personnel production process can be divided into three types: the roles which the individual brings with him into the organization (e.g., the prospective recruit arrives with the roles of "son," "student," and "friend" of others whose opinions of him impact on his attitudes and behavior); those which are imposed by the organization in preparing him to perform his military function (e.g., "trainee," "follower," and eventually "leader"); and those which emerge or are acquired at some later point, independent of vocational considerations (e.g., "father," "husband," or "community leader"). It seems to me to be a feasible undertaking to analyze each of the stages of the personnel production process, and to define the set of roles which are appropriate for each stage, or which can be expected to emerge within it.

Of the various components which define a given role, probably the most central and important is expectations, since they represent, on one hand, the cognitive expression of values associated with the role, and on the other, the mental preconditions to appropriate behaviors. It is worth noting here that the
expectations associated with each role can also be of three types: expectations which the individual has of himself; expectations which the individual holds about the people associated with him in that role, and about the environment (i.e., the organization); and, expectations which the organization and its members have of the individual.

Socialization Agents

As each stage of the personnel production process has associated with it certain identifiable roles, so each role has associated with it an array of "sources of influence," or "agents of socialization," which serve to impart the necessary knowledge, understandings, and skills required of that role. Although I will use the term "socialization agents" repeatedly, this is a fairly loose and inclusive term. In this context, it refers not only to people who directly influence the socialization of an individual (instructors, leaders, etc.), but also includes the full range of influence factors such as policy, organizational structure, training methods, incentives, etc. Some of these agents of socialization are subject to organizational control or manipulation. Other socialization agents or influences are not under the same degree of organizational control. Assessment of the degree of control exerted by the organization will therefore be an important step in deciding whether or not a given means of socializing personnel is workable. The socialization process begins even before enrollment into the military, since ideas about the values, norms, and behaviors appropriate to military service have already begun to be formed through pre-enlistment experience (hence the inclusion of the "pre-recruitment" phase in Figure 1). This occurs through recruit advertising (a socialization agent under direct military control), through such things as contact with retired military personnel (a set of socialization agents who are under some degree of organizational control) and the media (television, movies, literature, etc., which are almost totally outside of military control in most Western countries).

Initial training is clearly a critical step in the socialization process, and probably represents the most traumatic phase in the total process of transition from "civilian" to "serviceman." Here, the socialization agents are, more than any other stage, under direct organizational control, since just about every aspect of the recruit's environment and experience is subject to some form of direct manipulation by agents of the organization. The processes contained within this stage are, of course, important in their own right. Just as important, however, (and perhaps not so clearly understood) are the relationships between the previous phase (recruitment) and more importantly the following phase (specialized skills training). The importance of this sequential interdependency of the various stages of the socialization process can be illustrated with an example from the Canadian approach to officer training.

All officers undergo a rigorous common initial training course of approximately three months duration at the CF Officer Candidate School (CFOCS). They are evaluated under deliberately induced conditions of physical and emotional stress, and are often encouraged by instructional staff with exhortations such as "if you can make it here, you've got what it takes." The successful graduate
who goes off to be trained as, say a logistics officer, and who may be employed on an Air Force base, must wonder what relevance all the stress and pain of map exercises, weapons training, lack of sleep, etc., has had to the job which he has been assigned. Most probably view it as a "rite of passage," and carry on with their careers.

Now consider the CFOCS graduate who goes off for further training as an infantry officer (which is certainly a quantum leap beyond CFOCS training in terms of physical demands and stress). The infantry officer candidate often feels shocked, or cheated and mislead, when faced with the much greater demands of infantry officer training than he was led to expect. The significant attrition (for motivational reasons) observed in Combat Arms Officers Courses comes as no surprise. The culture shock which occurs for these trainees has been identified by several knowledgeable individuals (including some of the more enlightened members of the Infantry School staff) as a major factor in this attrition. A few have recommended changes to the infantry training. Most see the need for a different kind of CFOCS training. All, however, recognize the disjuncture, in terms of the socialization process, between the two stages of training.

Failures of the Socialization Process.

The socialization process is the means whereby the necessary values, norms, behaviors, and expectations are imparted to the individual. It is a building and an integrative process, wherein values and norms become better understood, more consistent with each other, and more internalized. Various skills and behaviors become integrated. Expectations become more accurate and realistic. The sequence of socialization practices must be articulated such that each developmental stage of socialization results in role definitions which are consistent with the achievement of the ultimate objective of a military force, i.e., operational effectiveness. Failures in the socialization process (i.e., failure to inculcate values, etc., that are consistent with not only the needs of the current stage of the total socialization process, but also with each of the following stages) result in role conflict. By this is meant conflicting expectations either within or between roles. This in turn can result in various types of dissatisfaction and a loss in effectiveness.

Another example from the CF officer training system serves to illustrate this point. The Canadian Military College (CMC) system recruits its cadets in large part on the basis of the superlative engineering degree programs it offers. The importance placed on what the degree signifies is apparent in the ceremony in which the "iron ring" is presented to engineering graduates (who form a large part of the graduating class). At least part of the CMC socialization process leads directly to expectations that one will be employed as a professional engineer, with a concomitant deemphasis on building realistic expectations of the sorts of leadership/junior administrator demands which are typically placed on young engineers in the first years after graduation. Socialized as engineering professionals, these young officers often leave the military immediately after completing their tour of obligatory commissioned service, which they see as having been a period of professional frustration and dissatisfaction.
In peacetime, especially when the economic environment is good and vocational opportunities exist outside the military, role conflict often results in just this sort of attrition. When economic conditions preclude voluntary separation, loss of effectiveness can take such forms as loss of productivity (work-to-rule), medical/psychiatric problems, suicide, administrative difficulties, etc. In wartime, it may take the form of increased casualties, both emotional and physical, and failure in battle, individually and collectively.

Cost/Benefit

The final concept to be presented is a non-traditional definition of "cost/benefit." Traditionally, cost/benefit is defined in terms of monetary costs, since motivational failures are most obvious in the form of attrition, which represents the loss of enormous amounts of unrecovered investments in training funds. However, direct assessments of monetary costs made in this fashion miss an important intervening step, which is the assessment of the effect that any apparent problem, or proposed solution, may have on the socialization process. Only by identifying through care analysis, the likely impact of any training strategy, incentive, structure or other intervention, on the motivational objectives of the stage (or stages) at which the intervention will be inserted--and more importantly, on the motivational objective of subsequent stages--can the really important effects of such interventions be assessed. While these effects may eventually be assessed in monetary terms, the primary consideration should be whether the intervention will support or interfere with the acquisition of appropriate sets of roles and role definition, i.e., with values, behaviors and expectations which lead to the ability and the will to fight.

Reliance on attrition analysis as a means of providing some direct index of organizational motivation or morale is dangerous. For example, low attrition has, at times, been interpreted as evidence of good motivation and morale. But what if the few that are leaving are the very best we've got? It is accepted that not all attrition is dysfunctional. What if the ones who are remaining include the ones that we ought to be getting rid of? Economic conditions can preclude voluntary separation as a response to dissatisfaction. What if just about everyone in the military is disgruntled and demotivated, but remain in the service only because economic conditions are so poor? It is doubtful whether this is the type of military that we can rely on to go into battle with some confidence in their willingness and ability to fight.

Analytic Framework

With these concepts in mind, it should be possible to develop an analytic framework with which to analyze the various models related to motivation which contribute to an understanding of the overall socialization process. It should also be possible to develop and/or evaluate organizational interventions aimed at ameliorating the process (training strategies, personnel policies, incentives, structures, etc.) and to generate researchable hypotheses in support of this. This analytic framework might take the form of a series of
questions which, with its starting point anchored on the ultimate objective of
the organization under consideration, might allow us to work back through the
personnel production process in a rational and meaningful way. What follows is
a first (and rough) approximation of such a set of questions.

a. What is the ultimate objective of the organization?
b. What elements (equipment, manpower, etc) are needed to achieve it?
c. What specific things must the human elements of the organization be
   able and willing to do?
d. How should they be organized as groups?
e. What sort of individuals are needed to make up these groups?
f. What must they as individuals be able to do?
g. What values, behaviors and expectations must they have to be able
to do these, i.e., what set of roles must they have acquired?
h. What are the stages of development and integration for the
   acquisition of these roles?
i. How are these roles transmitted, i.e., what are the socialization
   agents for each role at each stage of role acquisition/integration?
j. What kinds of manipulations can be effected through these agents?
k. Are these agents under organizational control?
l. What is the relative effect of each of these manipulations in terms of:
   (1) inculcating the required role at the current stage of development; and
   (2) role definition at later stages of development.

A more schematic view of part of this analytic strategy is presented in Figure
2. It represents the logic of defining roles and reflects the means whereby the
process of inculcating them can either be developed or evaluated.

Different Definitions of the Ultimate Objective

Before leaving this analytic strategy, a brief digression on the concept of the
"ultimate objective" is in order (one which has particular relevance for a
unified force such as Canada's). An alternative term for "ultimate objective"
might be the "prime directive" of the organization. For the Army, this might be
"to close with and destroy the enemy" (a traditional Canadian definition). For
the Navy, it might be "to fight the ship." The Air Force might see their prime
directive as being "to keep the aircraft in the air." One can array these on a
The socialization process leading up to the ability and willingness to engage in the fulfillment of these prime directives is obviously going to be quite different. The traditional denigration of each other by these two groups attests to this difference. To illustrate this, let us take as an example two young transport drivers trained in Canada's unified training system. Both undergo the same initial recruit training; and both are provided with the requisite basic driving and maintenance skills at a common trades training course. One goes off to serve in a combat support role in a Service Battalion within one of Canada's Army formations. The other is posted to an Air Force Base. Think of the contrast between, in the one case, extended periods of field duty, cold, wet, grime, trench-digging and sentry duty and in the other case clean sheets, regular hours, compensatory time off, overtime or shift work, and regular meals. If the socialization process associated with each of these environments is working reasonably well, each of these transport operators is likely to accept his role, and to perform it reasonably well and cheerfully. Imagine the reaction, however, if their career manager decides, for reasons of professional development, or equity, or (as is more often the case) organizational exigency, to switch these two on their second tours of duty. They are likely, shortly after they arrive at their respective new units, to feel that they have just recently passed each other going in opposite directions on the stairway connecting heaven and hell.

Integration of Existing Models

As mentioned at the outset, a considerable amount of work has been done, and continues to be done, on various models related to the general topic of motivation. Not being intimately familiar with any of these endeavours, but being at least generally knowledgeable in several, I have concluded that these models tend to be localized within one or another phase of what I have termed the personnel production process. In terms of implications for further research and development in these areas, the framework which I am presenting here suggests the need to look more carefully at the possible interdependencies of these models as they relate to structuring a coherent, overall socialization process. For example, an attraction model is needed. Once developed, this will presumably be translated into policy, procedures, and materials for recruitment. It will be important, however, to examine how the motivational set installed at the recruiting stage articulates with that of recruit training and later stages. CFCIS is an example, using a realistic recruiting philosophy, of addressing these sorts of issues at the initial stages of a military career.

Sarason's work suggests the central role of that acquiring a sense of "self-efficacy" as in the motivational processes of recruit training. There are obvious connections between this and Mullin's cross-national findings on
enlistment motivators (e.g., desire for self-development). However, just as important will be the connections between the development of a sense of self-efficacy in recruit training and its sustainment through later stages of individual and collective training and employment.

Leaders (instructors and commanders) obviously are (or ought to be) one of the most important socialization agents at all stages of the process. Models developed in support of selection and training of leaders must therefore take into account the critically important role of "socialization agent."

As a final example, work being done on the military family, and on attrition/retention issues, will be more meaningful and useful if it recognizes the interdependency, and potential for conflict, among roles which the military imposes (such as commander, instructor, technician, etc.) and those which it cannot legally, morally or practically prevent from being assumed by the typical member of the service (such as husband/wife, father/mother, etc.). Society is changing in its views on where and how the traditional domestic roles fit within the world of work. The unique demands which the military places on its members and on their families demands a better understanding of how to fit the organization to the individual, or vice versa.

Advantages of a Conceptual Framework

Within such a framework, it should be possible to:

a. Develop strategies for developing models which, as a totality, are internally consistent and represent an understanding of the complete socialization process;

b. Develop testable hypotheses and research strategies to validate this set of models, individually and as a set;

c. Devise programs and policies which achieve the motivational objectives of the organization; and,

d. Develop policy-capturing strategies to assess the impact of these policies and programs in more than just attrition/training dollar terms.

If the type of framework which I have presented has any value, it will be to serve as the cement which will bond together much of the interesting and valuable work on motivational issues in which members of UTP-3 are participating or have some interest. While taking nothing whatsoever from the utility and validity of the models currently being built, it does suggest the need for attention to their interdependency. As a provocative rather than a definitive treatment of these issues, this paper will have been successful even if it serves only to stimulate discussion and critical comment.
Where Do We Go From Here?

The basic question at this point concerns whether the panel wishes to pursue the idea of developing some form of a comprehensive model of military socialization as part of its continuing activities. If so, a further question concerns whether any members of the panel see sufficient value in what I have outlined to set up some form of collaborative relationship within the panel, and to impose a degree of structure by devising a set of tasks and objectives to be acted upon in the coming year.
Figure 1

PHASES OF THE PERSONNEL PRODUCTION PROCESS

MOTIVATION TO REMAIN

MOTIVATION TO JOIN

PRE-RECRUITMENT
RECRUITMENT
RECRUIT TRAINING
INDIVIDUAL SKILLS TRAINING
COLLECTIVE TRAINING

READINESS MAINTENANCE

COMBAT OPERATIONS

MOTIVATION TO FIGHT

PRE-RECRUITMENT

recruit

TRAINING

INDIVIDUAL
SKILLS
TRAINING

COLLECTIVE
TRAINING

READINESS
MAINTENANCE

COMBAT
OPERATIONS

MOTIVATION TO FIGHT
1. What roles should the individual have at this stage of his development, according to his function within the organization.

2. What sources of influence determine the acquisition of each role?

3. What are the means whereby these agents exert their influence on role acquisition?

4. To what degree are these agents under organizational control?
Cohesion and Motivation in the German Federal Armed Forces

Friedrich W. Steege, Psychological Service, Federal Ministry of Defense
Bonn, Germany

Introduction

Societal change in Germany has brought about a climate where traditional ways of (authoritarian) administration and military leadership will no longer suffice. The relationship between the military organization and our conscripts and recruits has to be reevaluated in every stage of what has been called the personnel production process. Particularly the conscript deserves, and is in need of, special care to bring to his understanding a new perception of the attractiveness of our present Armed Forces. We have to take in young men who often have neither an affinity to norms and ethics of the military, nor do many of them even accept the necessity of (their) military service. Thus, it is necessary to find cues to a personal interest which can be combined with the necessities of national defense.

Research on Defense Motivation and Moral Development

My efforts during the last two years have been devoted to these problems. My method was to gather empirical data from our research institutions, to interpret historical materials and evidence and try putting all this in perspective.

What has to be recalled here is the development of what has become known as "inner" (or moral) leadership since West German forces were reestablished in the 1950s. The origins of this concept were a consequence of the past aimed at preventing Germany from having unpolitical soldiers again. At the same time it was a liberal "avant-garde" concept that only through clever political strategy became part of official politics; Adenauer seems to have accepted it mainly in order to appease the opposition with regard to the rearmament of the FRG. In the years of Social Democratic Government, there was no real thrust to return to some crucial aspects of "what is soldierly," that were obviously missing in these early conceptual considerations.

On the contrary, the upheaval and the massive protests of students in the late 1960s brought with them a considerable demand for more "civilized" Armed Forces. In this phase of our postwar history, it became "fashionable" to regard people who were seriously concerned about the mission and duties of servicemen as hardliners, and to label them as being in disaccord with the societal norms.

The upswing of protest later found a very significant interpretation in a (converted) Freudian expression of "belated disobedience" of a German generation which should have emerged three decades earlier. Primary expression of that delayed protest was a new emphasis on the fundamentals of morality. This new concern, however, left often aside relevant elements of reality.

One result of this way of thinking is the application of the theory of individual moral development, and of the (KOHLBERG) "dilemma method" as its primary research tool, to defense problems. A wave of social scientific research
occurred in the last decade in our country that contended to have empirically proved the higher moral quality of those who decided to reject entering, or supporting, the Armed Forces, or even the necessity to defend their fatherland.

I have recently formulated scientific arguments for the indispensable value orientations of the military, derived from the ethical foundations of community, state, government, and nation, that are independent of individual moral development.

To my knowledge, social science has not yet developed a (theoretical) bridge between micro-social (individual) and macro-social levels of societal values. There is no evidence whatsoever to hypothesize that both levels, the individual and the societal, are equivalent, as many of the moral development researchers have expressly contended.

This brings me to my central argument: A new consensus is needed in our society delineating the basic beliefs to be held with respect to national defense and its legitimacy. Beliefs of legitimacy do strongly influence defense motivation, combat motivation and cohesion as well, and cannot solely be based on a stage of individual moral development.

Recent youth surveys revealed that a high percentage of young men who are liable for military service are very strongly influenced by legitimacy considerations and reflect the pro's and con's of defense policies in much detail. There are individual differences with respect to intellectual capacity, upbringing, family background, area of residence (town/land), etc. On the other hand, there is a good deal of "emotionalization" which is a combined expression of several, partly conflicting, tendencies such as "internalization" (stable partnership, youth religions), "sensibilization" (civil rights, environmental protection) and "solidarization" (peace movement, third world). These tendencies lead to an increased polarization of the age groups to be conscripted. The military organization and military leadership have to face them and to look for the best feasible ways to cope with them.

Research on Cohesion and Morale

Problems of that kind have also to be envisaged with respect to motivation, morale, and cohesion of soldiers within the Federal Armed Forces. Therefore, I would now like to briefly summarize some of our most recent research and/or policy contributions to the following issues: (1) changes in the replacement system of the Federal Army, (2) a design for leadership and information feedback system on unit level, (3) research on interpersonal behavior in military hierarchies, and (4) a survey on disciplinary measures.

(1) There has been a long lasting thrust for a new soldier replacement system, especially in our Army. A similar development has obviously occurred in some nations at the same time. The aim is to improve the effectiveness of, and climate within, units by the extension of unit life cycles, i.e., to establish programs intended to build cohesion, wherever possible. This contribution to both "horizontal" and "vertical" cohesion has been a concern for the last
decade. In 1985, the Federal Army will have implemented the replacement of entire companies from the very beginning of their military terms, i.e., starting with basic training of recruits. Since 1982, as an intermediate measure, we have been replacing soldiers in the same way but after the basic three month training.

(2) The second example of research for bettering morale and cohesion is the design, and a first trial of, a leadership and information feedback system at unit level. This system was designed to get questionnaire information on the attitudes and opinions of the soldiers and to provide feedback to their immediate commanders. The questionnaire is tapping the following information:

- Demographics (e.g., age, rank, status)
- Various aspects of job satisfaction, "tensions at work," "support by superiors," unit morale
- Various other subject areas (e.g., fulfillment of expectations, readiness for reenlistment, attitudes towards the Federal Armed Forces, etc.).

The technique was first tested with crews of speedboats in the Federal Navy, and an application to cruiser crews is being planned. The field evaluation had mixed results. Some commanders appear interested in learning how the results of their leadership compare against their peers. Other commanders say it is useful but redundant with what they already know. With regard to an eventual implementation of the system, we are still trying to convince the services to adopt it as a tool for improving morale and cohesion.

(3) A third example is research being conducted in the area of interpersonal emotions and behavior. It refers specifically to perceived hostile reactions, intent of third-party aggression and the possibilities of reducing hostile aggression between military hierarchies. The main hypothesis is that soldiers have a (suppressed) fear that they may be adversely affected by their superiors. The methods here are scales and indices for measuring self-esteem, social support by comrades/peers, fear of self-determination vis-a-vis the superior, penetration of harm cognitions, and wishes of retaliation. A first general result is that this problem is not as widespread as was contended. However, we expect contributions to behavior modification programs from this research which can aid to mitigate the (possible) extent of (perceived) hostility between military hierarchies where necessary.

(4) A fourth example of research is a contribution to one of the negative indicators of the "vertical" aspect of cohesion, i.e., disciplinary measures. A large survey study was conducted by the Center of Civic Leadership and Education and the Psychological Research Group, Bonn, including almost 2,000 privates, 1,400 NCO's and 300 officers (approximately one-half company commanders/captains and battalion commanders/lieutenant colonels). The method was one questionnaire for subordinates (privates and NCO's) and another for superiors (officers). One of the reasons to design this investigation was the fact that there had been a drastic decline of those disciplinary measures.
during the last decade that can be dealt with by the immediate superior. It turned out that the decline was mainly due to two facts: first, to the perception that these measures are very laborious in administrative terms, and second, they have no adequate but in many cases rather a contrary effect. Thus, special educational measures like guard duty or weekend duty are preferred. However, there has been a lot of criticism against this way of handling educational measures because they are less accepted by the soldiers. A solution is still being considered.

Conclusion

The research examples may provide an impression of the permanent need to improve morale and cohesion in West German soldiers, as is necessary in most of the Western Democracies today.

I could imagine that there is some ambivalence inside and outside our country as to the evaluation of the reflections and the facts presented in regard to research on moral development. Complaints could perhaps emerge about the loss of the "paradise" of an unquestioned existence of national defense. On the other hand, one could argue about where the primary danger is coming from, and whether asking the basic questions referring to the prevention of a possible "absolute" war is morally bad, etc. Basically, it is my conviction that soldiers who are trying to reflect and rationalize basic issues of defense must not necessarily be deleterious to motivation and cohesion, and that nations with conscription have to include the moral reasoning into their efforts to convince the individual of the necessity of defense. Thus, we could bring the empirical efforts and evidence to the conclusion that it is necessary to devote more attention particularly to the draft situation in our country.
In his 1917 address, Yerkes (1918) outlined the areas of interest in the first American foray into military psychology. They were aviation, battle stress, classification of personnel, training, and motivation. These areas of emphasis were again prominent in World War II era psychological research.

Thus, while psychological research in World Wars I and II principally related to individual classification, research efforts were pursued which are still active today. Particularly relevant to today's presentations are the areas of motivation, cohesion, and battle stress. World War II era research emphasized social cooperation and interdependence. The role of the military in maintaining research into leadership and group processes is apparent in our present discussions. These areas of research continue to be actively pursued.

In our third workshop on combat stress (Mangelsdorff, King, and O'Brien, 1983), the following points were emphasized:

a. Objective measures, such as Army Training and Evaluation Program results, should be field oriented, and should emphasize group training, and reward group efforts.

b. The historical recognition of importance of cohesive small groups and interpersonal relations was emphasized. One should remember that soldiers fight for comrades.

c. In peacetime settings group cohesion may not always be related to the types of performance desired and can produce some problems in the garrison Army in the absence of appropriate vertical cohesion.

d. The importance of the vertical and horizontal elements of cohesion was emphasized.

e. Cohesion is both a force multiplier in time of war and a training mutiplier in time of peace. Research is needed to address the question of primacy--which comes first--cohesion or performance?

f. Another research question to be addressed is the failure of cohesion to relate to all indices of performance, e.g., ARTEPs.

Harris' (1983) discussion of the Sinai operation--Boredom in the Sinai--emphasized several concerns over developing cohesive small units able to operate in relative isolation and in controlling boredom. Leaders felt that cohesion building programs would relieve boredom, while troops felt that these programs may build cohesion but did not relieve boredom. The cohesion efforts
employed in the Sinai were training, athletics, and extensive squad activities. The boredom was not alleviated because of perceived underutilization, cultural deprivation, lack of privacy, and isolation. These variables were most significant for Observation Post personnel; others were generally challenged by their duties to a greater degree. The importance of comparable experiences to prepare units for specific types of missions cannot be overemphasized. The unit rotation policy in effect during this operation, while cohesion building, removed any opportunity for socializing of new arrivals by old hands. Cohesion does not seem to offer protection from the effects of boredom.

At a recent DOD psychology symposium, Goldstein (1984) discussed the Israeli Defense Force's (IDF) recent experiences. They see unit morale as a protection against combat stress. The stress related to the role of family member, e.g., concerns for their safety, is a valuable predictor of stress reactions in the IDF. With that background, I will now discuss today's presentations.

Dr. R. Ellis's paper, Toward a conceptual framework for the military socialization process, describes the motivational stages of prerecruitment, recruitment, entry training, skills training, readiness maintenance, and battle operations. These all represent distinct levels of motivation which must be developed in the soldier. The stages and the motivations are sequentially interdependent. There are social roles associated with each of these stages, only some of which are under organizational control. The importance of the family role cannot be underestimated in a discussion of soldierly motivation.

An effective organization will provide appropriate role expectations and socialization agents, to the extent that these are under its control, at each stage. A failure to deal with these issues will lead to conflicting expectations about a role or between a soldier's multiple roles. Role conflicts, particularly between the soldier role and the family role, can be expected to lead to increased stress casualties in battle. The severe limitations of attrition analyses as a measure of organizational motivation is quite valuable, and needs to be emphasized. Each type of organization will have its own hierarchy of roles. Armies tend to emphasize the soldier role while Air Forces tend to emphasize the technician role. When non-organizational roles are considered the potential for conflict is great in the poorly socialized individual.

Drs. F.W. Steege and M.L. Rauch's talk, Cohesion and motivation in the German Federal Armed Forces, discusses a conscript force which is very strongly influenced by legitimacy considerations. Their research efforts include:

a. Implementing a company replacement program to promote cohesion. Units will be together starting with basic training.

b. Developing a system to provide leaders with information on the opinions of their troops on topics such as unit morale and satisfaction, expectations about service, feelings toward service, etc. The system has not yet been adopted.
c. Research into friction between levels of the military hierarchy. First results suggest that the problem is very limited.

d. Relationship of disciplinary measures to vertical cohesion. The recent decline in the use of such measures was due to the perceived administrative burdens of such actions, as well as the belief that these measures were ineffective. In-unit punishment is being used but is not well accepted by troops.

Drs. R. Gal and F.J. Manning's paper, Individual and organizational components of military cohesion: A cross-national comparison between the U.S. Army and the Israeli Defense Force, asks: What Israeli lessons learned can and should the U.S. Army adopt in its development of cohesion technology?

The armies were found to be similar in terms of factors reflecting the leadership, small groups, personal, and professional aspects of morale. The ordering of factors did differ, perhaps reflecting differences in circumstances between the two armies. Horizontal bonding seemed to be strongly related to operational readiness across the board. Vertical bonding is even more important for morale than horizontal bonding. Interestingly, the greater the probability of combat, the higher the association between vertical bonding and morale. Historically, there is a much greater tendency for troops to rely on their leaders in combat than at other times.

Drs. A. McRae and A.R. Mangiardi's discussion, Cohesion technology and military unit cohesion within the United States Army, describes the COHORT system as being developed based on studies indicating the importance of both vertical and horizontal cohesion in military units. It was felt that stability and predictability within company sized units would provide an environment in which both types of cohesion could develop. This would lead to a more effective unit. Cohesion technology is the application of planned efforts, methods, and procedures to enhance and maintain military cohesion, e.g., both horizontal and vertical cohesion. Based on the results with early companies, a training package is being developed to address the problems which appeared.

Mid level NCOs seem to have the most problems in adapting to or accepting the New Manning System (NMS). They felt that career opportunities were more limited, that their workload was higher, and that the companies themselves were less well accepted. A high level of vertical bonding was apparent in these results. Combat arms schools are developing technical skills packages, while the Soldier Support Center (SSC) is working on a training package dealing with the NMS, leading horizontally bonded troops in a COHORT environment, and necessary human relations training. Evaluation procedures for NMS units have the potential for yielding a unit morale and performance feedback system similar to that in the IDF.

Drs. E.E. Yoest and T.R. Tremble's, Impact of cohesion on leader behavior outcome relationships, evaluated the impact of leadership style in units of both high and low cohesion. The results suggested that cohesion did not generally moderate the impact of leadership style on the outcomes selected.
A high degree of association was found between the extent to which leaders displayed people-oriented behavior and the extent of satisfaction with the unit.

The failure to observe the moderating influence of leadership style may relate to the size of the present units (ca. 100), as the literature tends to emphasize that squad and crew sized units are the real centers of cohesion in military units. Leadership style related to unit satisfaction and not to unit outcomes.

Drs. F.J. Manning's, Plusses and minuses of unit cohesion: Some hypotheses based on observations, discusses the importance of tight bonding among members of small combat units, in this case, members of Army Special Forces A Teams. The importance of bonding within small units is well documented in time of war, but much less well evaluated during peacetime. The A Team members reported a higher level of physical and mental well being than did Special Forces troops not in such teams, while showing a greater reliance on their unit and the Army than did non-team soldiers. These soldiers place a very high value on peer esteem. Their spouses view the team cohesion as a threat to the family unit, but the soldiers tend to view this as the spouses' problem. This is role conflict of a sort and may suggest that more attention should be paid to the socialization and other needs of family members. These soldiers do not display a high degree of vertical bonding.

The research presented here today leads me to draw the following conclusions:

a. Valid comparisons can be made across widely varying military organizations.

b. Multinational efforts in the areas of cohesion and motivation ought to be pursued at every opportunity.

c. Cohesion efforts will require support at all levels of the system.

d. The study of cohesion is not new. History notes that cohesion efforts are trade-offs which tend to impact on all aspects of the personnel system.

Harris, J.J. Observations from the Sinai: Boredom - a peacekeeping irritant. Presented at the International Meeting of the Inter-University Seminar on Armed Forces and Society, Chicago, IL, 1983.


DISTRIBUTION:

Cdr, Defense Technical Information Center, ATTN: DDA, Cameron Station, Alexandria, VA 22314 (2)

Defense Logistics Studies Information Exchange, USA Logistic Management Center, ATTN: Mrs. Alter, Fort Lee, VA 23801 (1)

Dir, Joint Medical Library, Offices of The Surgeons General, USA/USAF, The Pentagon, Rm 1B-473, WASH DC 20310 (1)

Army Library, ATTN: ANR-AL-RS (Army Studies), Rm 1A518, The Pentagon, WASH DC 20310 (1)

Headquarters, Department of The Army, ATTN: DASG-HCD-S, WASH DC 20310 (1)

Medical Library, Brooke Army Medical Center, Reid Hall, Bldg 1001, Ft Sam Houston, TX 78234 (1)

Stimson Library, Academy of Health Sciences, Aable Hall, Bldg 2840, Ft Sam Houston, TX 78234 (1)