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## The Human Element in Combat

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The dominancy in combat depends on several factors including objectives, strategies, weapons and materials, technology, numbers of soldiers, and of course, the human element. More specifically, cohesion, e.g. interpersonal bond of an organization in order to sustain their will and commitment to each other, their unit, and the mission, plays a major role in this regard. Importantly, defining the objectives and purposes of the battle, appropriate and timely logistic support, structural organization with regard to individual characteristics, and leadership would influence military cohesion. Furthermore, motivation and control, surveillance and conformity, commonality of values and societal factors play important role on the small unit cohesion. However, civic education is most effective in the soldiers' contribution and resistance within and after a battle. Then commanders and leaders construct the bases of cohesion in their unit by assessing the individual psychological state, societal condition, and spiritual characteristics to obtain success during a confrontation. In this literature review, several psychological aspects of cohesion are outlined. JAMM International expects receiving expert opinions from military systems in respect of their own cultural and organization characteristics, and requirements for a discussion.

Keywords: Combat Disorders; Psychology; Military Medicine; Cohesion

### 1. Introduction

One of the challenges for military planners in a high-tech world is to be influenced by the destructiveness of modern weapons. Based on the currently popular theory, modern war will last for days or weeks rather than months or years, where technologies not people dominate in war; however, the human element in combat cannot be overlooked even in modern wars. Instead, it has a great impact on war results. For instance, Iraq's war with Iran was potentially a high-tech and swift war. Cohesion, e.g. mutual beliefs and needs that cause people act as a collective whole, had played a significant role in the Iran-Iraq war than all the sophisticated weapons on either side. Based on an Army War College study on the unit cohesion in the Iraq War, "successful unit performance is determined by social cohesion (the strength of interpersonal bonds among members) rather than task cohesion (a sense of shared commitment to the unit's mission)". These conclusions have important implications for scholarship as well as for numerous United States military policies such as the Unit Manning System (1). Several factors including objectives and strategies, weapons and materials, technologies, numbers of soldiers, and the human element should all be considered in determining who wins and why. While, the human element in war is our major concern, a single-cause explanation must be avoided. This appears to be the case with the determining factor in future modern wars as well.

### 2. The Significance of Military Cohesion

According to American literature, the United States and its allied forces overwhelmed the North Vietnamese and should not have had difficulty for defeating them during the second Vietnamese war (1965-1972) based on the traditional methods of measuring military power. Approximately 40% of all the US Army combat-ready divisions committed in the war and were supported by 50% of the US Tactical Air Power and one-third of the US Naval Forces. In opposition, the North Vietnamese fielded an army in the south that was inferior in strength and significantly inferior in logistical support, firepower, and mobility. Such a massive firepower had never concentrated against an opposing army in such a limited area for such an extended period of time before. In such a situation, North Vietnam had to rely on the human factor (2, 3). Van Tien Dung, the Chief of Staff of the Army, outlined their strategy: "Our arms and equipment were weaker than the enemy's; thus, we could only develop moral superiority (within the army) and only then had the courage to attack the enemy, only then dared to fight the enemy resolutely, only then could we stand solidly before all difficult trials created by the superior firepower that the enemy had brought into the war." Following this strategy, the North Vietnamese Army maintained its cohesion and endured while all other armies were defeated or retired from the battlefield. When Van Tien

#### Implication for health policy/practice/research/medical education:

In parallel to modernization of the applied technologies in wars, the human elements in combat might be overlooked. While military cohesion is the most important factor in determining the battle outcome, commanders must notice the basic factors that shape their military unit cohesion including psychological, societal, and individual factors.

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Discussion

Dung spoke of "moral superiority" within the ranks of the North Vietnamese Army, he was referring to what many analysts consider the creation of one of the most cohesive armies ever fielded (2). Their soldiers could endure some of the most stressful situations due to the attention to the human elements including cohesion and psychological factors. Obviously, the North Vietnamese experience is not unique. Examples can be cited from the Wars through World War II, the Korean War, and prominently, in Iranian soldiers who defended their country during the Iran-Iraq war. Although in most cases, interesting stories were noted about the events and the role of cohesion, the origins and development of cohesion were mostly overlooked.

### 3. Measuring Military Power

Four major elements have been traditionally described for assessment of the preparation for and the analysis of modern warfare: (a) strategy, (b) weapons, (c) technology, and (d) numbers of soldiers. Nevertheless, the psychological aspects of human factors are seldom mentioned in those analyses. However, modern approaches pay more attention to this factor (4). The human element has been referred to by terms such as "sprite de corps", "group morale", and "elan" (2). Although various analysts have emphasized differently, they have all tended to refer to the motivation of an individual soldier as part of a group. Currently, the favored term, cohesion, is given a broader and more definitive meaning. More specifically, cohesion has been defined as the bonding together of the members of an organization/unit in such a way that sustains their will and commitment to each other, their unit, and the mission. Even more specifically, cohesion exists in a unit with congruent goals for the individual soldiers, small groups, and the unit leaders. A soldier in a cohesive group retains his primary loyalty to the group so that he trains and fights as one with all members willing to face the risk of death to achieve a common objective. The nature of modern war indicates that small-unit cohesion is the only force capable of causing soldiers to expose themselves consistently to war dangers in pursuit of an army's goals. The confusion, danger, hardship, and isolation of the modern battlefield have caused a pronounced de-emphasis on strict orders, rote training, and coercive discipline (3). Accompanying these changes has been increased the emphasis on controlling soldiers through an "internalization of values" and operating rules congruent with the objectives, goals, and values of the organization (4).

### 4. Characteristics of a Cohesive Army

Evidence of cohesion in an army must be sought where it occurs: "at the small-unit level among the intimate, face-toface groups that emerge in peacetime as well as in war"(2). To demonstrate a general consensus, a cohesive army would be characterized by the following features:

1) The party, army, or other sources of goals, policy, and support;

2) The "human element" or the small intimate groups that control and motivate soldiers through their norms;

3) The influence of the leader on the small group and the resulting commitment of the individual soldier toward achieving army goals.

The only level in an army where these three factors simultaneously occur and therefore, the most appropriate focus of research on cohesion, is the point at which the organization, the small group, and the leader come together in an army, ie, the lower levels of the organization (2). Squad, platoon, and section-level units are ideal for this approach because the formal organization is evident at this level, it is possible to observe how small-group members respond as individuals within these organizations, and leadership techniques and their impact on the small group are also evident at this level (2, 5).

### 4.1. Organizational Characteristics

Perhaps the primary function of the organization is to provide purpose to the cohesive unit in the form of goals and objectives. The overall organization of an army must serve to transmit the war goals through a chain of command to those specific units ultimately charged with accomplishing the goals (5). Another function of organizational top management is to provide the varied support required by lower-level cohesive units. Personnel and logistical support as well as policies designed to promote cohesion is the requirement of an organization (1, 2). The final function of the organization is to prescribe structural characteristics for the small unit that would promote cohesion through individualism within the soldier to promote responsibility. This constantly reminds soldiers of his responsibilities to his comrades, leaders, the squad, the platoon, and ultimately to the people and the nation (4, 5). Consequently, certain organizational characteristics are extremely important such as the size of the group, which is inversely proportionate to the numbers of individuals in the group. The ideal size is up to nine men, with some armies choosing a three-man unit or "military cell", which becomes the basic personnel building block of the army. Another factor is the soldier's belief about the duration of his commitment to the unit. The longer the soldier expects remaining in his unit, the greater the attained cohesion would be. Finally, fully structured associations among soldiers within the group not only influences their cohesion, but also establishes boundaries around the group and form a clear distinction between members and nonmembers, or between "us" and "them" (6).

### 4.2. Small Group and Unit Characteristics

Small cohesive units usually have several apparent characteristics. The unit serves as a basic, tactical, fire-and-maneuver or service unit (1). 1) The cohesive unit must function as a "buddy group" capable of satisfying basic physiological and social needs of an individual soldier.

2) Another characteristic is the presence of a "dominant group", which controls the day-to-day behavior of the soldier. The leader operates within this group to ensure that group norms or behavioral expectations are congruent with organizational objectives.

3) A final characteristic is the existence of an "observationand-reporting system" that is self-correcting for deviance from group norms by mobilizing the peer groups or leadership pressures in order to correct individual behavior.

Functions of the larger organization are to establish the organization goals and objectives, provide support, and prescribe small-unit policies for:

a) Numbers; cohesion is inversely proportionate to the size;

b) Duration; the longer the duration, the stronger cohesion becomes;

c) Frequency; the more association between the team members, the more promoted the cohesion;

d) Structure; the more structured the relationships, the more promoted cohesion.

### 4.3. Leadership Characteristics

Functions of the leader are to transmit organization goals to the small group, lead the unit in achieving goals, maintain desired small-group norms by ensuring organizational support as well as detection and correction of deviance, create or maintain an ideologically sound soldier through introducing example, teaching, or indoctrination (3).

### 5. Assessing Cohesion in Small Units

A cohesive unit:

1) Provides adequate food, water, medical support, rest, and essential supplies and weapons;

2) Provides the major source of esteem and recognition;3) Provides a strong sense of mutual affection and at-

traction among unit members;

4) Protects the soldiers' rights and regulates relations with higher-ranked authorities;

5) Provides the soldier with a sense of influence over events in his immediate unit;

and

6) Causes the soldier to identify strongly with immediate unit leaders at squad, section, platoon, and company levels.

A cohesive unit will ensure that the soldier is aware of all legal, moral, and physical barriers that separate him from the rest of society and tend to keep him within his unit. A cohesive unit would not discharge and transfer soldiers easily, will exact significant penalties for being AWOL ("Absent Without Leave") and for dumping the unit; on the other hand, it will recognize and reward successful completion of service (7).

# 6. Maintenance of Unit Integrity and Stability

An army built of cohesive units will structure smallest units not to exceed ten soldiers with subelements ranging from three to five soldiers under the positive control of the respected leadership. In order to maintain the unite integrity and stability, experts suggest the following approaches;

1) Use a unit rotation system rather than individual replacements,

2) emphasize personnel stability within units,

3) rely on rites-of-passage processes in basic training,

3) Initial entry to resocialize soldiers,

4) Form initial cohesive units; maintain high frequency of association among unit members by reinforcing unit boundaries through design of stations, day rooms, and prayers room,

5) Provide recreational clubs and athletic facilities designed to promote unit association at off-duty social and athletic events,

6) Distinguish boundaries of the unit by creating a "wethey" view through traditions, ceremonies, and distinctive insignia,

7) Prohibit soldiers from joining to autonomous groups with possibly deviant norms,

8) Clarify pass and leave policies that keep leave short and encourage joint passes with other unit members,

9) Reduce centralized, bureaucratic control over the good things in the soldier's life and give control of these to the immediate leaders of the individual soldier.

Pay, promotions, leaves, passes, and awards should be disseminated and in some instances controlled by no higher than section or company level (8).

### 7. Motivation and Control

A cohesive army should establish motivation and control system by:

1) Emphasize the development of unit norms and values in such a way that unit members become bonded together in their commitment to each other, the unit, and its purposes;

2) Avoid using managerial leadership but emphasize personal and continuing face-to-face contact with all the soldiers by the leaders;

3) Clear expressing terms of service or expected performance;

4) Refrain from persuading soldiers and junior leaders to accept difficult jobs or duties through material reward, e.g. bonuses for enlisting in combat arms or special benefits for taking first sergeant positions, inspirations, or admirations;

5) Surveillance based on peer observation reports on deviant soldiers violating of group trust concerning common expectations about individual attitudes and behavior.

### 8. Commonality of Values

Although units are drawn from a heterogeneous society, they are ethnically similar and share other major cultural characteristics or are integrated and socialized to the degree that minorities are able to communicate effectively, share and adhere to the dominant secondary and primary group norms, and do not form autonomous minority groups with separate norms incongruent with army norms. Significant researches are conducted on the association between the commonality of cultural characteristics and the phenomenon of nationalism. Common religion, race, ethnic group, social class, age, geographical region, and history promote the communications that are necessary to a common primary group for the interpersonal intimacy. Varieties in characteristics within a unit, such as language, religion, race, history, and the values that accompany these characteristics, tend to hinder cohesion. Developing over time, these cultural values can be traced back to such factors within the larger group as history, language, and religion. A sense of belonging to a common values, ethnic group, or race, often with an accompanying religion, also contributes to nationalism. Potential for nationalism indicates the degree of cohesion (4). Nationalism may be defined as follows: a belief on the part of a large group of people that they constitute a community called a nation that is entitled to independent statehood and the willingness of that people to grant their primary terminal loyalty to their nation. Cultural values, beliefs, and faith have central role in nationalism and consequently in army cohesion. In term, nationalism requires two major factors: an adequate population and the extent of the territory. There is no recognized minimum number for either factor. Modern nation states can be militarily powerful and yet be relatively small in numbers of citizens and square meter of the territory. Furthermore a sense of a common and respected history, shared values, or even senses of a common future contribute to nationalism. Generally, a people's history is a source of common values. It will be a force that draws a people together, especially if it includes a significant period of trial such as fighting and winning a revolutionary war or a war in defense of its boundaries. Such a history rapidly becomes part of a people's culture. Legends and historical tales become part of every citizen's socialization.

A common language also promotes nationalism. It eases communication among a people for a wide variety of purposes, while also establishing firm boundaries that often distinguish the group from the others. A sense of belonging to a unique ethnic group or race, often with an accompanying religion, also contributes to nationalism. Consider the Iranian resurgence of national pride and unity with its emphasis on the spiritual charismatic leaders, Persian heritage, and Islamic religion. More significantly, leadership is an extremely important nationalistic factor. It is essential that the nation is the primary loyalty among the elite of a people. An elite or leadership with loyalties divided among transnational parties, specific geographical regions, or particular ethnic groups or tribes within the larger secondary group is a significant hindrance to the emergence of nationalism and ultimately, to the cohesion in that nation's army. The final indication of a group's potential for nationalism is affected by all of the preceding indicators. It is the degree to which the overall population is aware that they are part of a nation and the priority they give to that nation (5, 6). Briefly, a nation's potential for nationalism and ultimately for cohesion in its army is indicated by the degree to which the following are present:

1) A large and enough population

2) Sufficient territory

3) A common and unique history

4) A common and unique culture

5) A common language

6) A common religion

7) A common race

8) A nation that is the primary loyalty for the elites

9) Population awareness of the nation and giving their primary loyalty to it

10) The soldier's belief that his nation's political system is the best as a result of socialization or indoctrination and the evidence of the superiority of their system

11) A felt need by the soldier to take actions against other system broad cultural, moral, or religious values to protect their system and the norms that have been internalized by the soldiers

12) National appreciation, rewarding, and reintegration of the soldiers into society upon the successful completion of their service

### 9. Leadership in Cohesive Units

The effective leadership of the soldiers in combat and in peace is a complex and difficult duty. In parallel to the changes in the nature of modern wars, there has been a shift from physical control toward the discipline internalization by soldiers during the past 100 years. The requirements of the leadership have changed significantly. There has been a change in establishing discipline, rote training, and drill. The dispersion, confusion, danger, and hardship that characterize modern battlefields have made the internalizing values and codes of behavior essential to lead the soldier to act as a reliable member of his unit in combat. Because of the important role of small group in shaping soldier's loyalty, values, and codes, the primary task of the organization is to control the small fighting group through its leaders. Training and situation drills assist the leader in building cohesive units. The confidence that characterizes well-trained troops, especially the training that is validated in combat, is significant; the soldier needs to feel that he is part of a group that can successfully meet and survive most situations found on the battlefield. The drill aspect of training also

contributes by helping the soldier to overcome the often immobilizing fear experienced in combat operations (eg, airborne) and by helping him to take appropriate actions as expected by the group. Outside threats perceived by the group also cause it to coalesce to face a common danger. It is the leadership, however, that is the most critical factor in building cohesive units (9, 10).

### 9.1. Characteristics of Leadership in Cohesive Units

Leadership that is most effective in building cohesive units has several characteristics. Of primary importance, leadership is not managerial in approach. Instead, it emphasizes personal, empathic, and continuous faceto-face contact with all the soldiers in the unit. Because the leader's ability to develop fully professional relationships is limited to a small number of soldiers, units must be necessarily small to achieve a maximum impact. An army's maximum leadership efforts must be focused at the small-unit level where the leader makes the link between the formal organization and the fighting soldier at the squad, platoon, and group level. Above these levels. a managerial role would be more emphasized; however, the transition from leadership to managerial styles is a problem for some armies. Personal leadership and model, along with the spirit of the offense, under the slogan of "Élan!" were thought to be appropriate for all levels, especially among the field grade ranks. Today, few armies adequately make the required transition from the major emphasis on leadership required at lower-level units to the very different managerial and strategic emphasis required at higher levels of command. For example, the assumption that because an officer was a highest-rank commander he would also be an outstanding battalion, brigade, or division commander is not warranted. Although different skills are required in building a cohesive army, leadership skills at company and lower-level units are the most critical and must be given priority. Leaders at the small-unit level in a cohesive unit should have a degree of charisma and a deep attitude and ability to guide the unit gracefully in repeatedly surviving difficult situations (11).

Men in danger become acutely aware of the qualities of their leaders. They desire leadership so that their immediate needs can be met and their anxieties controlled. In this regard, well-trained and respected company grade officers and sergeants relay a sense of competence and security to their soldiers and if successful over a period of time, gain a degree of influence and control over members of their units, which is often associated with charismatic leaders.

In battle, nothing succeeds like success. In contrast, casualties can significantly weaken group cohesion, especially casualties that are considered wasteful and are attributed to the leadership failure or unreasonable missions by soldiers in the unit. Such a situation puts the unit leader in a difficult position between requirement to complete his assigned mission and his duty to maintain the integrity and welfare of the unit. In their linking function between soldier and organization, leaders must be perceived by unit members as protecting them from harassment and unrealistic missions. In addition to building upon success, the unit leader must act to neutralize the effects of failure. In success or failure, the leader uses the perception of outside threat or difficult challenges to mobilize and coalesce the unit. Then, the effects of failure can considerably vary, depending upon whether the unit is in the front line or in the rear. When cohesion has been seriously impaired, focusing on fight for survival, and need can be used by the unit leader as a basis for rebuilding cohesion. The soldiers' individual need for self-preservation affects their relations within their unit. Whatever the ultimate effect of civic education, it is dependent upon unit leaders. An essential requirement is that first-line leaders have authority to implement the policies and procedures necessary for the creation of cohesive units. If authority is centralized at higher levels of command for political or economic reasons, small-unit leaders often are left without the means to execute their responsibility. As a result, soldiers quickly see that the sources of good things in their life are not controlled by their immediate leaders. Promotions, pay, leave, passes, job assignments, and performance policies are the sources of influence for the small-unit leaders. In addition, Feedback enables the leader to adjust their behavior and activities over time along with the changes in the situation (12).

The primary function of the small-unit leadership is to bring about congruence between the requirements of the organization and the needs of the individual soldier. The leader must bring about internalized values and discipline within the soldier to enable him to overcome his fear and face the enemy fire (13, 14).

### 10. The Effect of Ideology

Indoctrination or civic education is the most effective method in getting the soldier to the battle and in assisting him to withstand further combat after a battle. However, morals, value, and ideology have a great impact on unit cohesion and the outcome of the battle. Therefore, units organized on the basis of similar values have a much better chance at congruence with organizational objectives. If this is not possible, extensive efforts must be made to socialize all soldiers into the desired value system of the group. The greater the effectiveness of these efforts is, the less formal controls required within the unit will be.

In many cases, broad ideological slogans and goals have become specific operational rules of behavior within the small units. Additionally, a substantial body of evidence demonstrates that faithful soldiers are better able to resist and to stop the spread of demoralization and the impact of ideology on cohesion and unit performance. Certainly, the resistance of soldiers, officers, commanders, and volunteers in Khorramshahr during the Iraq-Iran war for defending the city is one of the best examples.

### 11. Sources of Leader Influence

There are several sources of power and influence that is essential for a leader to control and direct the group at the squad, platoon, and company levels (15):

1) Reward and coercive power: In cohesive armies, awards and commendations as well as restriction and criticism are rooted strongly within the group and are implemented within full view of the unit (16).

2) Legitimate power: Legitimate power in cohesive units may be defined as compliance with orders because of attitudes or beliefs that have their basis in a feeling of internalized "oughtness "(a sense of what is right and wrong) that, in turn, is based on learned cultural values. Legitimate power tends to be the most impersonal source of power. It is dependent upon cultural value congruence among members of the unit and between leader and subordinates. Leader reliance on legitimate power is usually greater during the earlier period of a soldier's service or after defeat or extreme hardship when other sources of power are not as effective (17, 18). In addition to arising from cultural values, legitimate power can also derive from the reputation of the organization the leader represents. Legitimate power reaches its most potent influence when the leader becomes a surrogate for authority figures held in the greatest respect by unit members. Soldiers respond to legitimate power much in the same manner that citizens respond to a policeman or that a parishioner responds to a priest (19).

3) Referent power: In cohesive armies, the formation of such close ties between soldiers and leaders is not a matter of individual initiative or chance but of official policy. The spiritual factors and psychological aspects of an effective communication would play a major role in this regard (20).

4) Expert power: Leaders in cohesive units are assumed by the group as professionally competent to successfully meet the situation and environment faced by the unit.

The power of a leader is not merely managerial in approach, but includes an emphasis on personal and continuing face-to-face contact with all soldiers in the leader's unit the leader will use the perception of outside threat or difficult challenges to mobilize and coalesce the unit, utilize the effects of indoctrination or civic education to maximize leadership influence. The . The leader must emphasize on professional ethics that all members of the unit and especially the leaders share equally, all hardship and danger. They are granted sufficient authority to control events or actions within the unit in order to meet their responsibility for building a cohesive unit, by the power to reward, the power to coerce, legitimate power, referent power, and expert power (21, 22).

### 12. Conclusion

Cohesion, common values, and leadership must be viewed within a holistic approach that considers individual, organizational, situational, and social factors. Cohesion is the most important factor of unit performance and combat result. Many of the cohesion elements are structured before the battle and therefore, commanders must focus on them before, during, and after a combat. This makes a sufficient knowledge about human elements essential for the commanders and leaders. This discussion remains open for experts to share their knowledge and experiences.

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