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LEADERSHIP STYLES IN  
UNITED STATES MARINE CORPS  
TRANSPORT HELICOPTER SQUADRONS

by

David Jerome Salter

December 1989

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Leadership Styles in United States Marine Corps  
Transport Helicopter Squadrons

by

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Major, United States Marine Corps  
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Submitted in partial fulfillment of the  
requirements for the degree of

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## ABSTRACT

This thesis examined leadership styles in United States Marine Corps transport helicopter squadrons. Analyses were conducted to determine how leadership styles related to subordinate extra effort, leader effectiveness, satisfaction with leader, unit cohesion, and unit morale. The importance of military history to the development of military leaders was also examined. Leadership styles of officers were evaluated by the leader himself as well as his subordinates, superiors, and peers. Proactive transactional leadership styles were found to be the most commonly used styles, while reactive and non-leadership were found to be the least used styles. Transformational styles had a strong relationship to subordinate extra effort, leader effectiveness, and unit cohesion and morale. Differences in how a leader perceived himself as compared to how others perceived his style were also related to effective leadership.



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## I. INTRODUCTION

Reliance on hardware and technology as the focus of our national security may have to change. With the current climate of budget reductions and possible force cuts, the emphasis may shift to less costly force multipliers such as leadership. The role of leadership, while less tangible than weapons systems, has historically been demonstrated to be critical to combat effectiveness.

A considerable number of leadership research projects have been funded by the military. In fact, the topic of leadership has been the subject of extensive research for many years. Early efforts attempted to identify traits or personal characteristics of leaders reflecting the view that leaders are born, not made. This approach proved to be non-productive because no one combination of traits consistently distinguished effective from ineffective leaders [Ref. 1:pp. 98-99]. The research focus shifted to behavioral approaches that examined leadership functions and styles, for example, the Ohio State studies [Ref. 2:pp. 94-100]. Contingency approaches also emerged that emphasized the situational nature of leadership, for example, Fiedler's contingency theory [Ref. 2:pp. 101-102]. The appeal of the newer ideas to the military

and others is that if such characteristics can be determined, they can perhaps be trained.

These approaches to leadership have recently been supplemented by theories of transformational leadership. The proponents of these ideas view much of the previous work in leadership as "transactional theories" in which leaders communicate requirements to subordinates in exchange for which subordinates receive rewards or punishment. In contrast, transformational leaders motivate (transform) their subordinates to do more than expected. [Ref. 3:pp. 11-17]

Several studies have found that subordinates perceive that transformational leaders contribute more to the effectiveness of the organization than the transactional leaders. Additionally, these leaders were rated as higher in leadership potential by their superiors [Ref. 4:pp. 18-19]. These results have been found in military and civilian organizations, but such research has not been conducted in the Marine Corps.

This thesis is an attempt to contribute to the leadership data base through an investigation of United States Marine Corps (USMC) leadership styles. A survey was conducted to classify a leader's style as transactional, transformational, or laissez-faire. The survey was administered to a group of USMC officers who were commanding officers or officers in charge at the squadron level ranging to the maintenance



division level. These focal officers were also evaluated by their superiors, peers, and subordinates.

The focal leader's style was compared to various outcome measures. The purpose was to determine which leadership style was most related to positive outcomes.

## II. BACKGROUND/LITERATURE REVIEW

### A. BACKGROUND

Leadership, cohesion, and morale are the key human intangibles of war [Ref. 5:p. 143]. Despite the American inclination toward the material and concrete, the lessons of history consistently show that these three factors are far more important than superior numbers or weapons, and when combined with better tactics can prove to be overwhelming [Ref. 5:pp. 153-156].

The difficulty of quantifying troop leadership and morale results in an emphasis on weapon performance and numbers. However, Dunnigan notes that history is full of armies that have been defeated while holding the technological edge. "Superior motivation, leadership and training have consistently proved the formula that produces victorious armies." [Ref. 6:pp. 294-206]

Dunnigan maintains that victory usually results when "one side's leaders are demonstrably better than the others' leaders" and that "superior leadership need not be of earth shaking dimensions in order to be effective." [Ref. 6:p. 307]

The military, above all others, should be interested in leadership and what style is the most effective. Erwin Rommel believed,

the tactical leaders of the future ... will need not only mental gifts of a high order, but also great strength of character if he is to be a match for his task. Because of the great variety of tactical possibilities which motorisation offers, it will in [the] future be impossible to make more than a rough forecast of the course of battle. This being so, the issue will be decided by the flexibility of mind, eager acceptance of responsibility, a fitting mixture of caution and audacity, and the greater control over the fighting troops. [Ref. 7:p. 517]

Rommel goes on to say that the leader "must be tactically and technically competent;" he must have "initiative and energy: lead by personal example;" and "try to establish personal contact with his men, but without weakening his authority." [Ref. 7:pp. 516-518]

Several recent studies have investigated military leadership and unit effectiveness. For example, Marashian conducted a study of 50 United States Army infantry officers who had served as leaders of small units in combat in Vietnam. He found that leadership and the soldier's faith in that leadership directly affected the soldier's motivation to fight. [Ref. 8:pp. 57-63]

Gullickson, Chenette, and Harris studied excellence in the surface Navy. Results of the research showed that the excellent surface ship had a captain who knew what an excellent ship looked like and how to share that vision. Additionally, most of these captains did not micro-manage their ships but gave a general "big picture" view on running their ships. Technical expertise was not as important as the

ability to provide a direction to follow or the ability to get their officers and men to commit to that direction. Teamwork was very important, as was concern for the growth and development of the individual. Responsibility and accountability were pushed down the chain of command. [Ref. 9:pp. 113-117]

Forde also found that leadership was the most important factor in his study of excellence in United States Air Force tactical fighter squadrons. Commanders of these squadrons had a long-range goal or vision. Technical credibility was critical, unlike Gullickson's study above. Forde identified the squadron commanders' leadership style as people oriented and the leader as one who leads by example, cares about his people, recognizes and rewards excellent performance, and allows others to execute plans, make mistakes and learn from them. These leaders delegate authority to the lowest levels thereby developing and nurturing leadership "in house." [Ref. 10:pp.47-80]

The world outside the military is also very interested in leadership. The effects of leadership on human behavior and organizational effectiveness have been researched and studied by many theorists, philosophers, and practitioners. Yet agreement on what style, if any, is most effective has proven illusive. In fact, experts cannot even agree on a definition of leadership.

Estoni defined leadership as the ability to elicit the follower's response in a broad range of matters, based on the personal qualities of the leader [Ref. 8:p. 25]. Terry describes leadership as the activity of influencing people to strive willingly for group objectives, while Koontz and O'Donnel believe leadership is influencing people to follow in the achievement of a common goal [Ref. 2:p. 85].

Much effort has gone into trying to find the "true" nature of leadership. Trait theory was derived from the prescientific notion of the "great man" [Ref. 11:p. 4]. The "great man" theory originated with the ancient Greeks and was perhaps the first attempt to explain why some people were leaders and why others were followers. The basic premise was that leaders were born, not made. [Ref. 12:p. 10]

Prior to World War II, leadership research focused on the search for leadership traits. The theory was that leaders had identifiable traits or characteristics that could be used to predict who would be a good leader. Trait theory sought to identify the "inborn" traits that made leaders. Chemers and Rice noted two reviews that concluded that although "certain traits, such as intelligence showed consistent relationship with leadership status, such relationships were far too weak ... to be of any psychological significance [Ref. 1:pp. 92-94]."

Yukl notes that many of the leadership researchers, perhaps prematurely, discarded any consideration of traits as explaining who or what makes a leader [Ref. 13:pp. 69-70]. Most of the recent research in this area was conducted by industrial psychologists who were interested in developing selection criteria for managers. Instead of concentrating on who will be a leader, they concentrated on predicting who will be the most effective leader.

In this context, Stogdill maintains that successful leaders are often characterized by:

... a strong drive for responsibility and task completion, vigor and persistence in pursuit of goals, venturesomeness and originality in problem solving, drive to exercise initiative in social situations, self-confidence and sense of personal identity, willingness to accept consequences of decision and action, readiness to absorb interpersonal stress, willingness to tolerate frustration and delay, ability to influence another person's behavior, and capacity to structure social interaction systems to the purpose at hand. [Ref. 13:p 69]

After World War II, the research shifted to the leader's behavior, and divided this behavior into consideration (employee centered) and initiating structure (job centered). However, research was unable to identify which behavior was the most effective [Ref. 1:pp. 92-94]. Fiedler and others presented various contingency theories of leadership based on the premise that "there is no such thing as a universally good leader or one best way to lead ... and there is a range of leadership styles, approaches and different styles that are

minimally effective in different situations." [Ref. 1:pp. 98-99] However, some have been critical of situational leadership for being too complicated for practical use [Ref.13:p. 167].

Motivation has been seen as a fundamental aspect of defining leadership. For example, James found that employees who worked for hourly wages could maintain their jobs by working at about 20-30% of their ability. His study also showed that highly motivated employees work at close to 80-90% of their ability. He concluded that low motivation in workers is the same as having low-ability workers. [Ref. 2:p. 5]

If the leader is the one who tries to motivate people to accomplish some task or to strive for an organizational goal, then the measure of success would be whether the task was accomplished or the goal was reached. However, Bass contends that there is more to leadership than success or failure. There is also more to success than just the completion of the task. A manager may be successful simply because he holds positional power over his subordinates, that is, he holds the key to reward or punishment. But if the subordinate responds because he wants to, the leader has personal power also. In this sense the leader can go beyond being successful to being effective. The effective leader has affected the attitude of the individual or group and tends to have a sustained impact on productivity, while he may otherwise have only a short-term influence. [Ref. 2:p. 115] Hersey and Blanchard claim that

this may explain why some supervisors can get satisfactory output only when exercising tight control of their subordinates; the more effective leader depends on personal power and is characterized by more general supervision. [Ref. 2:p. 116]

## **B. TRANSFORMATIONAL LEADERSHIP**

The notion that leadership goes beyond goal accomplishment represents a perspective that may be more productive for military leaders than the ideas traditionally described in the research literature. This view is described in more detail in subsequent paragraphs.

Burns theorized that leadership was inseparable from the followers' needs and goals, and described the interaction between leader and follower as taking "two fundamentally different forms [Ref. 14:p. 19]." The first form Burns called transactional leadership in which both the leader and follower recognize each other's power and worth. These two parties then agree to exchange one thing for another; the leader exchanges a reward for the followers' actions. The other form, which Burns called transforming leadership, was characterized by a leader who, through addressing the followers' wants, needs, and other motivations, binds with the follower in pursuit of a higher purpose. [Ref. 15:p. 19]



Like Burns, Bass is interested in transformational leadership and has proposed and tested a theory that seems highly appropriate to the military environment. Bass describes his ideas in combination with transactional theories which, as noted earlier, characterize many theories of management and leadership. Transactional models are based on contingent reinforcement that may be either positive or negative.

Positive reinforcement encourages the subordinate to maintain his current performance levels, while negative reinforcement encourages the subordinate to change his current performance level. Typically, positive reinforcement comes in the form of praise or promotion. Negative reinforcement may be simply pointing out a deficiency and then following up with further instructions or guidance. Or, it could take more severe forms that affect pay and promotion opportunities. Management-by-exception is the style chosen by leaders who only take corrective action when there is a deficiency of some sort.

These styles, positive or negative reinforcement and management-by-exception, typify the transactional leader. These leaders are more interested in outcomes and efficiency than development of subordinates. The mission is goal accomplishment and the method is the carrot or the stick.  
[Ref. 3:pp. 11-13]

Bass discusses several studies, such as Hung and Schuler, Oldham, and Keller and Szilagyi, that show where positive contingent reinforcement produced not only acceptable performance but also improved performance and effectiveness. He also notes that Luthan and Krietner found that negative reinforcement when combined with positive reinforcement also improved performance. [Ref. 3:p. 124]

If the rewards are not contingent, i.e., not linked to performance, their impact on performance is minimal. Subordinate satisfaction or feeling of accomplishment is trivialized when such rewards are handed out indiscriminately. The effect of negative reinforcement that is not linked to substandard performance can also be very problematic with respect to performance. [Ref. 3:pp. 121-134]

The main component in transactional leadership is the ability of the leader to reward acceptable performance. If the authority to reward is not held by the leader, the leader loses power and subordinates will tend to look beyond that leader to the one holding the real power. For a transactional leader to be effective, he must have the ability to reward (and punish) his subordinates. Once the transactional leader has the authority to reward effective performance, he must clarify what is expected of the subordinate and what goals and performance will result in rewards. The leader should also make every effort to remove obstacles that might interfere

with subordinates reaching their agreed-upon goal. [Ref.3:pp. 127-133]

The type of reinforcement that is most appropriate depends on the needs of the subordinates. Young, inexperienced workers might need constant and continuous praise and instruction while older, experienced workers might need little reinforcement. Transactional style is most effective when what the subordinate does is clearly measurable and depends mainly on the subordinates' skill and effort. [Ref.3:p 128]

Bass suggests that contingent reward is under-utilized as a management style. He cites a 1983 study by Yankelovich and Immerular that found 22% of 845 industrial workers interviewed felt there was a direct relationship between performance and pay. Additionally, 73% said their performance declined because people got the same pay no matter how hard they worked. [Ref. 3:p. 130]

Transactional Leadership may be productive and effective or counter-productive and ineffective, but Bass feels that transactional leadership cannot inspire people to do great things or even dangerous things. Transformational leadership can inspire people, it can change organizations, and it can raise awareness. According to Bass,

... the transformational leader is one who motivates us to do more than we originally expected to do. This original performance expectation is based on our original level of confidence in reaching the desired, designated outcomes by means of our performance [Ref. 3:p. 20].

Such a transformation can be achieved in any one of three interrelated ways:

1. By raising our level of awareness, our level of consciousness about the importance and value of designated outcomes, and ways of reaching them.

2. By getting us to transcend our own self-interest for the sake of the team, organization, or larger polity.

3. By altering our need level on Maslow's hierarchy [of needs] or expanding our portfolio of needs and wants. [Ref. 3:p. 20]

Bass goes on to point out the transformational leader does not always transform for good; Hitler for example. Nor is transformational leadership at opposite ends of the leadership spectrum from transactional leadership. Leaders will often show characteristics of both types of leadership with positive contingent reinforcement being a good base to build off of. Bass associates four characteristics with the transformational leader: charisma, inspirational leadership, individualized consideration, and intellectual stimulation. [Ref. 3:pp. 21-118]

Charisma is that trait in some individuals that allows them to motivate and inspire people through the intensity of their personality. Charismatic leaders seem to surface in times of stress and change, perhaps because these leaders are best able to identify with the hopes and values of their followers. The followers develop an emotional attachment to the charismatic leader; they demonstrate enthusiasm and motivation for their work and they strive to follow the example set by their leader. Followers become involved with and committed to their

organization's goals. Their performance and confidence can improve significantly. [Ref. 3:pp. 35-43]

Image is very important to the charismatic leader. He must (at least appear to) meet the expectations of his followers in competence and morality. The charismatic leader also has self-confidence and self-esteem. These characteristics of charisma may not be rare; they may be suppressed by organizational traits of conforming to standards and not risking failure in order to succeed. [Ref. 3:pp. 44-45]

Leaders can be successful without having a charismatic personality, and not all charismatic leaders are successful. The charismatic leader can be transformational or transactional but his effect on followers will be related to how strong the other transformational traits are. Bass feels that both charismatic leaders will inspire their followers but the transformational leader will most likely also be a teacher, mentor, or coach. [Ref.3:pp. 49-52]

Inspirational leadership is closely associated with charisma. As noted above, charismatic leaders inspire motivation, and inspirational leadership is the chief way to motivate. Inspirational leadership uses emotional appeals to create a vision of organizational goals, a way to reach the goals, and most importantly to give followers the confidence to obtain those goals. The benefit of inspirational leadership

is to motivate followers to achieve performance and goals above their expectations. [Ref. 3:pp. 62-68]

Confidence-building is the principal method for successful inspirational leadership. Confidence is critically important in the military. For men to succeed in the highly stressful and uncertain environment of war, they must have confidence in their weapons and other equipment, their leaders' tactical ability, their fellow men, and confidence in the support of their country. They must have confidence in their own abilities. [Ref.3:p. 69] Hayes and Thomas suggested that "expectations of failure destroy morale. Confidence in victory ensures it [Ref.3:p. 69]."

Next to building confidence, the inspirational leader must be able to inspire belief in causes that are greater than the individual. To be successful in this, the followers must have values that can be related to the higher cause. In other words, the "cause" must be seen as something worth sacrificing or striving for and not something unworthy or unobtainable. [Ref. 3:p. 70]

Another characteristic of transformational leadership is individualized consideration. Individualized consideration ranges in scope from appreciation of a job well done to constructive criticism. In the transformational leader, this consideration is focused on developing the full potential of the subordinate. Part of this development process is realized

by the leader serving as a role model for his subordinates. Another part of this process is delegation, which increases the responsibilities of subordinates while helping them grow to their full potential. The leader's role here would be one of coach or mentor, allowing the subordinate the chance to work out problems, make mistakes, and then learn and grow from the process. Counseling is a major tool in showing individual consideration and developing each junior; each subordinate has different values and goals and should be treated differently from all other subordinates -- each according to his needs and desires. [Ref. 3:pp. 81-94]

Bass notes that individualized consideration may present problems in large organizations. As relationships develop between leaders and subordinates, an "inner circle" of subordinates may emerge. This inner circle, being closer to the leader, may receive more support and resources than those outside of the inner circle. The inner circle members may then become more committed to organizational goals, while the outer circle members become more deviant from organizational goals. The preferential treatment of one group can cause problems for both groups and the organization. The inner circle members rise and fall on the success and failure of the leader, and they are expected to work harder than the others. The outer circle members are less committed to the leader and feel they are not treated equally. The two groups may not communicate or

coordinate well, resulting in lower productivity throughout the organization. While giving individualized consideration, the leader must avoid creating an inner and outer circle of subordinates. All subordinates, though treated individually, should feel that they are part of the organization and the leader is interested in their continued growth and development. [Ref.3:p. 95]

A major component of the first three characteristics of transformational leadership consists of emotional responses between the leader and the subordinate. The fourth characteristic of intellectual stimulation motivates subordinates through reason and logic. The transformational leader, using intellectual stimulation, enhances the ability of subordinates to visualize and comprehend concepts and problems, allowing subordinates to fully commit themselves to solving organizational troubles. Being an intellectual is not enough, the leader must be able to stimulate the subordinate's imagination. [Ref.3:pp. 98-101]

Intellectual stimulation is important when problems faced by the organization are chaotic and ill-defined; when problems effect the ability of the organization to reach its objectives; and certainly when problems or situations threaten the survival of the organization or its members -- such as war. [Ref. 3:p. 103]



The leader should have a higher intellect than his subordinates, but not so much higher that he can't reach them or understand their needs. The rising quality of the enlisted ranks should both require a higher quality officer and reduce any potential gap in intellectual ability between the two groups [Ref. 3:p. 104]. Bass cites several studies that suggest that intelligence combined with experience is much more effective than intelligence-lacking experience in terms of leadership effectiveness. These studies also found that stress between the intellectual leader and his superior tends to suppress the ability of that leader, especially if job performance requires intelligence. [Ref. 3:p. 107]

The transformational leader may have one, some, or all of the above characteristics. It is most likely that the transformational leader will also use some transactional leadership styles. However, as Castens [Ref. 15:pp. 45-47] and Yammarino and Bass [Ref. 4:pp. 17-19] found, leaders who demonstrated transformational traits (with or without transactional traits) were seen to be more effective as leaders by both superiors and subordinates.

Other studies support these conclusions about the effectiveness of transformational leadership. Hoover, for example, found that transformational styles correlated highly with satisfaction and effectiveness, while transactional

styles were not significantly related to either leadership outcome. [Ref. 12:pp. 44-45]

Transformational leadership has been investigated in a military environment by Bass and Yammarino in their recent study of 186 naval officers. The researchers found that transformational leadership had the highest association, among leadership styles, with leader effectiveness and satisfaction with the leader as perceived by the subordinates. A smaller but positive relationship was found between these leadership outcomes and all transactional leadership styles except passive management-by-exception, which was not related to the outcomes. Non-leadership or a laissez-faire style had a negative relationship with perceived effectiveness and satisfaction. These three leadership styles followed the same pattern of relationships (having lower magnitudes) with the willingness of subordinates to put out extra effort. Bass and Yammarino also found superiors' performance appraisals of leaders were similarly correlated with leadership styles. [Ref. 4:pp. 18-24]

The present research effort will investigate these relationships on a sample of U.S. Marine Corps officers. Leadership styles and outcomes as they relate to differences in perception, unit cohesion and morale, and interest in history will also be addressed in this thesis. These variables are described below.

## 1. Perception

Hersey defines leadership style as "the pattern of behavior (words or actions) of a leader as perceived by others, suggesting that it is not important how leaders see themselves but how others see them that counts. [Ref. 16:p. 27]

Bass and Yammarino, on the other hand, noted that successful naval officers' perceived leadership styles were more similar to their subordinates' perceptions of them than were unsuccessful officers'. They also found self ratings failed to predict performance while subordinate ratings were predictive [Ref. 17:pp. 14-16]. Data will be collected to examine these relationships in this thesis.

## 2. Cohesion

Leadership has a major impact on cohesion and morale. The definition and importance of cohesion have been hard to gain a consensus on. Luttwak describes it in his recent book *The Pentagon and the Art of War*:

It is only when we visualize the terrible stress of combat, in which survival and success so often depend on the willingness of fighters to take risks for one another, that we can appreciate the crucial importance of "buddy solidarity" in the myriad of units, teams, and crews that make up the Armed Forces as a whole. [Ref. 5:p. 143]

Griffin, in an unpublished concept paper, defines cohesion as "the unity of effort of the individuals in an organization toward the accomplishment of organizational goals

[Ref. 18:p. 2]." Furthermore, he defines bonding as "the natural and developed affective (social) and instrumental (professional/technical competencies) relationships among the members of an organization and/or between the organization and its members [Ref. 18:p. 2]." Each type of bonding has three dimensions associated with it, horizontal (peer), vertical (leader) and organizational (unit). [Ref. 18:pp. 2-3] Bonding is not cohesion because there is no unity effort toward the accomplishment of the organization's goals. Johns defines cohesion as "the bonding together of individuals in an organization or unit in such a way as to sustain their will and commitment to each other, their unit and the mission [Ref. 18:p. 5]." Thus, bonding can lead to cohesion if the efforts of the bonded groups are directed toward organizational goals. According to Griffen, "organizations and leaders have the capability to influence bonding and shape the effort of individuals toward organizational goals. Leaders develop cohesion [Ref. 18:p. 6]." He is supported in this view by Johns who states "... leadership is the most critical element in achieving cohesive, effective organizations [Ref. 19:p. 6]."

Bonding in an organization gives that organization the potential for cohesion, and with cohesion greater performance. But, as Griffen points out, until a leader recognizes,

develops, and uses that bonding, the organization's full potential will go unrealized. [Ref. 18:p. 7]

Seashore viewed cohesiveness "... as a source of potent influences that may or may not be marshalled in support of the goals of the larger organization." And, that increasing productivity in organizations is a function of the leader's ability to develop a feeling of confidence and security in the management of the organization [Ref. 19:pp. 101-102]."

Seashore's research results showed that highly cohesive groups maintain more effective performance standards than groups with low cohesion. However, the group standards may differ from organizational standards depending on whether the group gets support from the larger organization. [Ref. 19:p. 30]

Seashore observed that cohesion can be developed if the organization (leader) acts:

- 1) to lend prestige to the group's members
- 2) to structure the organization so there is provision for groups of relatively small size
- 3) to maintain a continuity in group membership over a period of time. [ref 10:pp. 101-102]

Braun notes that cohesion cannot be viewed as a panacea but clearly it can be employed as a very powerful tool. Cohesion can enable units to increase training effectiveness, readiness, job satisfaction, teamwork, and retention. Braun, similar to Seashore, notes several conflicting studies that

show that "cohesiveness" or "highly cohesive groups" were associated with lower productivity. [Ref. 20:p. 27]

This effect has been seen in the military where groups of troops who have served together for some time (i.e., bonded) often do not perform assigned hazardous duties such as patrolling. The group goals -- surviving -- run contrary to the organization's goal, but a leader who recognizes that bonded group can turn them into a highly effective unit. [Ref. 20:p. 27] In spite of slight differences in the definition of cohesion, the research demonstrates the impact of group unity on performance, and supports the role of the leader in developing and directing cohesion.

### **3. Morale**

Morale and its importance to combat effectiveness has long been recognized by both great military leaders and theorists. Napoleon said that the moral is to the physical as three is to one [Ref. 21:p 39] and Clausewitz wrote "... we might say the physical are almost no more than the wooden handle, whilst the moral are the noble metal, the real bright-polished weapon [Ref. 22:p. 252]."

S.L.A. Marshall wrote:

Morale is the thinking of an Army. It is the whole complex body of an Army's thought: The way it feels about the soil and about the people from which it springs. The way that it feels about their cause and their politics as compared with other causes and other politics. The way it feels about its friends and allies, as well as its enemies. About its commanders and goldbricks. About food and shelter. Duty and leisure. Payday and sex. Militarism

and civilianism. Freedom and slavery. Work and want. Weapons and comradeship. Bunk fatigue and drill. Discipline and disorder. Life and death. God and the evil. [Ref. 23:p. 158]

Marshall argues that good morale does not come from discipline but suggests it is actually the other way around [Ref. 23:p. 159]. Luttwak and Horowitz believe that Israeli pilots had high morale mainly due to their elite status and their tactical training, which emphasized "dogfighting in the manner of medieval knights" instead of push-button missile tactics [Ref. 2:p. 200]. This suggests that if men feel special and their training emphasizes the importance of their actions then they would have high morale. It seems apparent that psychology may play an important role in developing high morale.

Hollander suggests that identification with the organization and its goals can be instrumental in developing high morale. He goes on to say, "in this respect, morale is a psychological state of the individual which reflects his dependence upon the group for certain satisfactions and security [Ref. 12:p. 31]."

Rommel describes the relationship between leader and morale as, "by skillful psychological handling, in which personal example plays a principle part, the performance of the troops can be increased enormously [Ref. 7:p. 518]." Adolf von Schell agrees, saying "we know that psychology is

tremendously important in war. It is a field unlimited in extent, to which every conscientious soldier should give much time and study [Ref. 25:p. 19]." Jomini maintained that "military spirit depends on the skill of the commander and the results from military institutions." He goes on to say that this "should be the object of the attention of every far-seeing government [Ref. 26:p. 56]."

Von Schell gives an account, repeated in *The Infantry Journal's* "Infantry in Battle," in which he was able to restore the morale and confidence of his men, shaken during a nearby artillery barrage, by having the company barber cut his hair during the barrage [Ref. 27:p. 357]. *The Infantry Journal* previews this (and other) accounts by saying,

the leader, by thinking objectively himself and by causing his men to perform tasks involving thought and movement, may successfully combat the intense mental strain of battle. So too will simple, matter-of-fact actions by a commander tend to instill in the men a sense of confidence and security. [Ref. 27:p. 355]

A common theme throughout much of the literature is the ability of the leader to maintain or restore confidence in his men. Rommel believed that "the soldier must continually receive fresh justification for his confidence [Ref. 7:p. 518]." In order to do this, "The commander must have contact with his men. He must be capable of feeling and thinking with them [Ref. 7:p. 226]." He also suggested that in setting the example, the higher the rank the better [Ref. 7:p. 241].



Field Marshal Montgomery saw the real strength of an army as being "far greater than the sum of its parts; that extra strength is provided by morale, fighting spirit, by mutual confidence between the leaders and the led, and by many other intangible spiritual qualities [Ref. 28:p. 17]." He goes on to say that if a leader can gain trust and confidence of his men then he has the assets to achieve great things because the battle is won by the spirit and morale of the junior officers and men. [Ref. 28:p. 17]

Clausewitz found that in combat "the loss of morale was the chief cause of the battle's conclusion [Ref. 22:p. 310]." Jomini agrees by saying "no system of tactics can lead to victory when the morale of an army is bad [Ref. 26:p. 295]." Montgomery concluded that "... the most important single factor in war is morale.... In battle it is morale which counts; no strategy can succeed without it. Once morale has gone, defeat is inevitable [Ref. 28:p. 564]." If morale is truly important and the leader can affect it to this extent, studying and understanding the relationship between these two concepts should play a bigger part in the training and development of our military leaders.

#### **4. History**

The study of military history can help officers to gain insight into the problems of today by learning from experiences of the past. It can also provide insight about

enemies and allies by understanding the events that led up to the present situation. Although technology changes, man does not and man's responses and reactions to war are excellent tools to look at expected behavior in combat.

The study of military history has brought tactical innovation to the battlefield many times such as "Maurice of Nassau devised tactical changes which Gustavas Adolphus brilliantly put to the battlefield test [Ref. 29:p. 31]." It is certainly interesting to note different lessons learned from World War I by the French and German Armies prior to the start of World War II. The Germans had concentrated exhaustively on the study of the war, while the French had not; since victory was their's it seemed there were no lessons to be learned. The Germans clearly demonstrated those lessons to the French in 1940. [Ref. 29:pp. 31-39]

Field Marshal Montgomery quotes Mao Tse-tung saying,

All military laws and military theories which are in the nature of principles are the experience of past wars summed up by people in former days or in our own time. We should seriously study these lessons, paid for in blood, which are a heritage of past wars. That is one point. But there is another. We should put these conclusions to the test of our own experience, assimilating what is useful, rejecting what is useless, and adding what is specifically our own. The latter is very important, for otherwise we cannot direct a war. Reading is learning, but applying it is also learning and the more important kind of learning at that [Ref. 28:p. 19].

Montgomery states that he agrees with Mao Tse-tung, maintaining that both the study of war and then applying the

study to battle are necessary for the development of military leaders. He notes that there is a tremendous amount of experience buried in military history, suggesting that "the great captains have always been serious students of military history [Ref. 28:pp. 19-21]."

Napoleon was more specific about military history, saying that those who would learn the art of war should study the Great Captains. S.L.A. Marshall suggests Napoleon's focus was on the "manner in which Alexander, Caesar, and Hannibal had sought the keys to military success is an understanding of human nature and in the molding of its power to their tactical and strategical purpose [Ref. 23:p. 160]."

More recently, General George S. Patton wrote,

To be a successful soldier you must know history.... What you must know is how man reacts. Weapons change, but man who uses them changes not at all. To win battles you do not beat weapons -- you beat the soul of man, of the enemy man. [Ref. 30:p. 107]

Golightly, in a recent *Proceedings* article, wrote,

History, it seems is dead. It strikes many as passe that serving as a commissioned officer in the U.S. Military involves us in a spectacular act of human spirit, that untold millions have given their lives to ensure its success, or even that we may be called upon to do the same. [Ref. 30:p. 107]

He goes on to suggest that the study of history gives us the tradition upon which all leadership and moral judgements can be based. [Ref. 30:p. 107] However, Spector maintains in a recent *Navy Times* article that history is more

important than just preserving tradition, it is something that leaders need to know. He suggests that it is an essential ingredient in the professional development of officers. [Ref. 31:p 10]

Luttwak notes only one area of expertise missing from the long list of qualifications held by the American officer corps and that is warfare itself. He asks where are the tacticians and strategists? He claims that the military academies treat military history -- "the only possible 'data base' for those who would understand war -- ... in a perfunctory manner as one subject among many." He is also critical of the amount of military history covered in higher level schools. He goes on to observe, "no wonder that the distinguishing characteristic of American officers is their lack of interest in the art of war [Ref.32:pp. 59-61]."

It seems strange that so little military history is taught at the service schools, but perhaps what is needed is a more systematic demonstration of the link between appreciation of history and leader effectiveness.

### **C. RESEARCH QUESTIONS**

Leadership seems to be the driving force in military organizations, causing organizations to bond together into cohesive fighting units, building unit morale and spirit, and

finally molding and developing subordinates into future leaders.

By looking at active military units, a sense of what leadership styles are being used by unit leaders and their impact on the unit's effectiveness may be determined. The following questions will guide the research effort and hopefully aide in understanding the nature of leadership and the effects of that leadership:

1. What are the leadership styles used most often in the subject units?
2. What is the effect of these styles on subordinates' willingness to put out extra effort, and which style is seen as effective?
3. What is the effect of these styles on unit cohesion and morale.
4. Does the leader's perception of his own leadership style, as compared to that of other observers, relate to effective leadership?
5. What effect, if any, does military history have in the development of military officers?

### III. METHODOLOGY

The data used in this thesis were derived from a series of surveys given to focal officers and their superiors, peers, and subordinates. The survey used was the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio from the Center for Leadership Studies and School of Management at the State University of New York at Binghamton [Ref. 33]. Additionally, the subordinate survey included eight questions to measure group cohesiveness taken from a study by Dobbins and Zaccaro [Ref. 34:pp. 208-209], which examined the effects of group cohesiveness and leader behavior on subordinate satisfaction in a military organization. The superior survey also contained questions relating to how a superior would rate the performance, morale, and cohesion of the focal officer's unit. The survey administered to the focal officer also included questions relative to the focal officer's knowledge of military history and his views of its importance.

All of the focal officers were male members of a Marine Corps helicopter squadron serving as maintenance division officers, department heads, or the squadron commander. There were seven squadron commanders, all Lieutenant Colonel (O-5); 31 department heads, of which two were 1st Lieutenants (O-2),

17 were Captains (O-3), and 12 were Majors (O-4); and 16 maintenance division officers, of which two were Warrant Officers, one was a 2nd Lieutenant, four were 1st Lieutenants, and nine were Captains. The 56 focal officers were all the officers available who met the following criteria:

- 1) they were available to participate in the survey;
- 2) their superior officer was available to complete the survey;
- 3) they held a squadron billet of a commanding officer, department head, or a maintenance division officer.

The survey was conducted in each squadron's Ready Room. The surveys were coded to ensure complete anonymity. The coding identified the focal officer by billet and which of the four surveys was used. Each focal officer completed a MLQ survey on himself; each superior officer of the focal officer completed a MLQ survey on the focal officer; one to five subordinates completed the MLQ survey on each focal officer (one=32.7%, two=30.9%, three=25.5%, four=9.1%, five=1.8%); and one to four peers completed an MLQ survey on each focal officer (one=29.4%, two=56.9%, three=11.8%, four=2%). Each squadron contributed between four and eight focal officers.

The focal officers were from nine different helicopter squadrons with four to eight focal officers per squadron (four from one squadron, five from one, six from two, seven from four, and eight from another squadron). Five of the nine

squadrons were CH-53A/D/E squadrons and the other four were CH-46E squadrons.

Ten of the focal officers had a bachelor's degree in engineering, 14 had degrees in science/math, 12 had degrees in history/political science, seven had business degrees, and 12 had another type of degree. The two warrant officers did not have bachelor's degrees.

The MLQ survey measures leadership on nine scales with three leadership outcomes for the focal leader's self-measurement as well as the subordinate and superior surveys, and seven leadership scales and three leadership outcomes for the peer surveys.

The nine leadership scales used from the self, subordinate and superior surveys are given below, divided into three different leadership styles. Each scale is described by a sample statement from the survey.

*Transformational*

1) Charisma (questions: 7, 16, 20, 44, 47, 47, 58) -- "Makes me proud to be associated with him/her."

2) Individualized Consideration (questions: 10, 13, 22, 33, 41, 54) -- "Treats me as an individual rather than just a member of the group."

3) Intellectual stimulation (questions: 4, 8, 21, 32, 37, 38) -- "Gets me to use reasoning and evidence, rather than unsupported opinion."



4) Inspirational leadership (questions: 25, 27, 31, 40, 43, 55) -- "Provides a vision of what lies ahead."

*Transactional*

5) Contingent promises (questions: 1, 9, 51) -- "Talks about special commendations and promotions for good work."

6) Contingent reward (questions: 23, 28, 45) -- "Personally pays me a compliment."

7) Active Management-by-Exception (questions: 5, 14, 19, 34) -- "If my work were to fall below par, he/she would point it out to me."

8) Passive Management-by-Exception (questions: 2, 3, 12, 29) -- "Is satisfied with my work as long as nothing goes wrong."

*Non-leadership*

9) Laissez-Faire (questions: 15, 17, 35, 39, 49, 53) -- "Avoids making decisions."

The seven leadership scales derived from the peer survey are given below, also divided into three leadership styles.

*Transformational*

1) Charisma (questions: 1, 10, 13, 21, 26, 28, 29, 31, 32, 33) -- "Makes me feel good to be around him/her."

2) Inspirational Leadership (questions: 14, 24, 40, 45, 51, 63, 69) -- "I go farther in reaching objectives because of him/her."

3) Intellectual stimulation (questions: 5, 12, 19, 35, 39, 44, 50, 56, 62, 68) -- "Stresses the use of intelligence to overcome obstacles."

4) Individual consideration (questions: 3, 8, 15, 16, 25, 27, 48, 54, 60, 66) -- "Spends a lot of time coaching me when I need it."

#### *Transactional*

5) Contingent Reward (questions: 2, 9, 11, 20, 22, 42, 47, 53, 59, 65) -- "Clarifies the link between performance and what the organization will provide in return for my performance."

6) Management-by-Exception (questions: 4, 17, 23, 34, 38, 43, 39, 55, 61, 67) -- "Takes corrective action if I make mistakes."

#### *Non-leadership*

7) Laissez-Faire (questions: 7, 18, 30, 37, 41, 46, 52, 58, 67, 70) -- "If I don't bother him/her, he/she doesn't bother me."

The three leadership outcomes derived from the self, subordinates, and superior surveys are identified below.

1) *Extra effort* by the subordinate (questions: 26, 46, 50, 56) -- "I do more than I am expected to do in my work."

2) *Satisfaction* of the leader by the subordinate (questions: 63, 64) -- "In all how satisfied are you with this officer."

3. *Effectiveness* of the leader (questions: 59, 60, 61, 62)  
-- "How effective is this officer in meeting the requirements of the command."

The three leadership outcomes derived from the peer survey are:

- 1) *Extra effort* (questions: 6, 36, 57)
- 2) *Satisfaction* (questions: 74, 75, 76, 77)
- 3) *Effectiveness* (questions: 78, 79)

The above questions for each scale or outcome were first converted to a five point index indicating how often the behavior related to the question was observed as follows:

- zero - "not at all;"
- one - "once in a while;"
- two - "sometimes;"
- three - "fairly often;"
- four - "frequently if not always."

The value for each question was summed for each scale or outcome and a mean was calculated giving the average value for each.

The superior officer of each focal officer was asked to rate the performance, morale, and cohesion of the focal officer's unit, department, or division (questions, 73, 74, 75 from the superior survey, respectively).

The subordinates of each focal officer were asked to evaluate the morale (question 79 of the subordinate form) and

cohesion (questions 71 through 78 of the subordinate form) of the unit, department, or division controlled by the focal officer.

Each of the ratings from both superiors and subordinates were converted to a five point format ranging from zero (very low) to four (very high). For the subordinate's cohesion factor, each of the values of the cohesion questions were summed and then the mean was determined to yield an average measure of cohesion for each focal officer.

The difference in perception, between the subordinates' perception of leadership styles and the focal officer's own perception of those styles was investigated in this thesis. This difference was defined as the difference between either the subordinates' or the superiors' perceptions of leadership style and the focal officer's perception.

Each focal officer was asked to evaluate the "importance of military history in developing effective officers." Of those that responded (n=56), 32.1% saw military history as "essential," 32.1% rated military history as "important," 30.4% rated it as "helpful," 5.4% saw military history as being "indifferent," and there were no responses indicating that military history was viewed as "harmful." Each focal officer was also asked to rate his own "knowledge of military history." Of those that responded (n=56), 21.4% rated their knowledge as "very good," 25.0% rated it as "good," 39.3%

rated it as "fair," 14.3% rated it as "poor," and no one rated their knowledge as "very poor."

Table 1 presents a list of the variables used in this study along with the survey from which the variables were derived.

**TABLE 1. LIST OF VARIABLES**

Survey derived	SELF	SUPERIOR	SUBORDINATE	PEER
Variable				
<b>LEADERSHIP STYLES</b>				
CHARISMA	SFCH	SPCH	SBCH	PRCH
INSPIRATIONAL LEADERSHIP	SFIL	SPIL	SBIL	PRIL
INTELLECTUAL STIMULATION	SFIS	SPIS	SBIS	PRIS
CONTINGENT REWARD (PROMISE)	SFCR1	SPCR1	SBCR1	PRCR1
CONTINGENT REWARD (REWARD)	SFCR2	SPCR2	SBCR2	PRCR2
MANAGEMENT-BY-EXCEPTION (ACTIVE)	SFMBE A	SPMBE A	SMBE A	PRMBE A
MANAGEMENT-BY-EXCEPTION (PASSIVE)	SFMBE P	SPMBE P	SMBE P	PRMBEP
LAISSEZ FAIRE	SFLF	SPLF	SBLF	PRLF
<b>LEADERSHIP OUTCOMES</b>				
EXTRA EFFORT	SFEE	SPEE	SBEE	PREE
EFFECTIVENESS	SFEE	SPEF	SBEF	PREF
SATISFACTION	SFSAT	SPSAT	SBSAT	PRSAT
<b>UNIT OUTCOMES</b>				
UNIT COHESION		RCOHESN	COHESION	
UNIT MORALE		AMORALE	MORALE	
UNIT PERFORMANCE		RPERFORM		
<b>FOCAL LEADER VARIABLES</b>				
MILITARY HISTORY	I_MILHIS K_MILHIS			
LEADERSHIP PERCEPTION DIFFERENCE	DIFF--	DIFF--		

#### IV. RESULTS AND DISCUSSION

This section presents a discussion of the leadership styles and outcomes found in the Marine Corps squadrons sampled. Descriptive statistics and Pearson correlations were used to examine the questions asked in this study.

Table 2 presents the leadership styles used by the leaders of the subject units. The descriptive statistics and correlations between the leadership styles and all outcomes are presented in Tables 3 through 6. These tables summarize the results derived from the subordinate, superior, self, and peer data, respectively. Table 7 presents the correlations between leadership outcomes (subordinates' extra effort, leader effectiveness, and satisfaction with the leader) and unit outcomes (cohesion, morale, and performance). Tables 8 and 9 show how differences in perception relate to subordinate extra effort and leader effectiveness. Table 10 presents the relationship between military history and unit outcomes.

The first questions of interest concerned the extent to which each leadership style is perceived as present in the sample. Table 2 shows how frequently each leadership style was perceived by each group of observers. The average rating of each leadership style was computed and the styles were ranked, beginning with the style most often observed. Although the

order of ranking is slightly different, subordinates and superiors generally agreed on which leadership styles made up the top three, middle three, and bottom three styles present in their squadrons. Individual consideration was consistently second while management-by-exception and contingent reinforcement (reward) switched between first and third. Laissez-faire was the least often observed leadership style.

**TABLE 2. LEADERSHIP STYLE RANKING BY OBSERVER**

OBSERVER				
RANK	SUBORDINATES	SUPERIORS	SELF	PEER
1	Management-By-Exception (a)	Contingent (2) Reinforcement	Contingent (2) Reinforcement	Charisma
2	Individual Consideration	Individual Consideration	Individual Consideration	Individual Consideration
3	Contingent (2) Reinforcement	Management-By-Exception (A)	Intellectual Stimulation	Management-By-Exception
4	Intellectual Stimulation	Charisma	Management-by-Exception (A)	Contingent Reinforcement
5	Charisma	Inspirational Leadership	Charisma	Intellectual Stimulation
6	Inspirational leadership	Intellectual Stimulation	Inspirational Leadership	Laissez-Faire
7	Management-by-Exception (P)	Contingent (1) Reinforcement	Management-By-Exception (P)	Inspirational Leadership
8	Contingent (1) Reinforcement	Management-by-Exception (P)	Contingent (1) Reinforcement	
9	Laissez-Faire	Laissez-Faire	Laissez-Faire	

(A) = Active (P) = Passive (1) = Promises (2) = Rewards  
 Note: data derived from MLQ surveys

Interestingly, peers had a completely different perception of the leadership styles used by their coworkers. They ranked charisma first and inspirational leadership last. It is likely



that these findings result from defining peers by billet instead of rank. A senior major department head has little in common, socially or otherwise, with a young captain department head 13 years junior. Another consideration is that peers in this situation are probably not as close as peers in an academic or training environment. Finally, the peer questionnaire, while similar to the other questionnaires, is not the same. For example, this survey does not separate either contingent reinforcement or management-by-exception into their two component parts.

Tables 3 through 6 are concerned with the next two research questions, dealing with the relationship between (1) leadership and leadership outcomes and (2) leadership and unit outcomes.

As shown in Table 3, subordinates were more likely to exert extra effort for leaders who demonstrated the transformational leadership styles of charisma, intellectual stimulation, and inspirational leadership. Surprisingly, the transformational style of individual consideration did not seem to induce subordinates to put out extra effort although it was ranked second in Table 2. This suggests that while individual consideration was a common leadership style, little was gained by the use of this style in terms of extra effort by subordinates. Bass notes the difficulties that can arise with this style, especially if the leader inadvertently develops an

"inner group" of subordinates and an "outer group" who do not feel as committed to the leader's goals [Ref. 3:p. 95]. The "inner group" are transformed by the leader and exert extra effort to accomplish organizational goals, whereas the "outer group" may feel so alienated that the amount of effort they exert falls below normal levels.

Neither of the transactional styles nor the non-leadership style of laissez-faire produced any extra effort by the subordinates. The transactional leadership result was not particularly surprising since the main thrust of transactional leadership is to gain expected results by giving the subordinates previously agreed to rewards for their efforts. The laissez-faire style was expected to have a negative effect, which it did but the relationship was not significant.

**TABLE 3. CORRELATIONS BETWEEN LEADERSHIP STYLES AND OUTCOMES - SUBORDINATES**

				OUTCOMES			
STYLES	SBEE	SBEF	SBSAT	COHESION	MORALE	MEAN	S.D.
SBCH	.48***	.77***	.78***	.16	.37***	2.68	.67
SBIC	.09	.48***	.48***	.33***	.34***	2.80	.49
SBIS	.35***	.58***	.58***	.24*	.33***	2.69	.55
SBIL	.45***	.59***	.57***	.46***	.57***	2.49	.56
SBCR1	.06	.29**	.30**	.29**	.39**	1.63	.76
SBCR2	.21	.29**	.36***	.29***	.28**	2.72	.77
SBMBE A	.16	.13	.10	.12	.07	2.85	.60
SBMBE P	-.13	-.02	.25*	.07	-.04	2.41	.61
SBLF	-.12	-.22*	-.29**	.02	.01	1.32	.51

Note: \* significance level of .1      n = 56  
 \*\* significance level of .05  
 \*\*\*significance level of .01

Subordinates' perceptions of leader effectiveness were strongly related to all the transformational styles, especially charisma. The transactional styles of contingent reinforcement (both promises and rewards) were also related to effective leadership, though not as strongly as the transformational styles. Neither of the management-by-exception styles were statistically significant, however laissez-faire was negatively correlated with leader effectiveness. This indicates that subordinates viewed transformational leadership styles as more effective than the other styles, and laissez-faire leadership as less effective. Similarly, the subordinates seemed more satisfied with the transformational leadership, especially a charismatic leader, than the transactional leader; they were less satisfied with the laissez-faire leader. These results are generally consistent with Bass [Ref. 3] and Bass and Yammarino [Ref. 4:pp. 17-18].

The unit outcomes of cohesion and morale, as perceived by the subordinates, were significantly related to both transformational leadership styles and the contingent reinforcement styles of transactional leadership. Two points of interest were the lack of a significant relationship between charisma and unit cohesion, and the much stronger relationship between inspirational leadership and both cohesion and morale. Charisma is a tie between leader and

follower and not between the follower and the group. Perhaps this suggests that unit cohesion is, at least partially, built from a vision of the unit and its goals and not the personality of the leader. The impact of inspirational leadership on cohesion and morale is interesting considering the subordinates saw it as one of the styles used least frequently. This might hint at the real power of inspirational leadership to develop cohesive units.

From the superior's perspective, the extra effort of the focal officer's subordinates was positively related to all of the transformational styles and the contingent reinforcement (both promises and rewards) styles of transactional leadership, as shown in Table 4. The laissez-faire style was negatively related to subordinates' extra effort. The relationship between contingent reinforcement (reward) and the superior's perception of the subordinates' extra effort was almost as strong for charisma, and stronger than the other transformational styles. The superior's view that subordinates appear willing to put out extra effort if the leader reinforces performance with tangible rewards was not consistent with subordinates' perceptions as seen in Table 3, but it may give an indication of what style these superiors either wanted or expected to see.

Superiors viewed the focal officers as effective leaders most often when transformational, contingent reinforcement

(reward), or management-by-exception (active) leadership styles were used. It seems that superiors believed that these two transactional modes were very effective leadership styles; very close in effectiveness to the transformational styles. Particularly interesting was the relatively high relationship of management-by-exception (active), which seems to be a style the superiors valued. Superiors saw the focal officer as ineffective when management-by-exception (passive) or laissez-faire styles were used.

**TABLE 4. CORRELATIONS BETWEEN LEADERSHIP STYLES AND OUTCOMES - SUPERIOR**

OUTCOMES							
STYLES	SPEE	SPEF	SPSAT	RCOHESN	RMORALE	MEAN	S.D.
SPCH	.52***	.83***	.79***	.70***	.51***	2.72	.80
SPIC	.32***	.63***	.66***	.24*	.31**	3.11	.65
SPIS	.45***	.68***	.72***	.40***	.34**	2.54	.73
SPIL	.55***	.71***	.74***	.48***	.51***	2.57	.67
SPCR1	.25*	.17	.23	.10	.03	2.28	.91
SPCR2	.51***	.64***	.69***	.36***	.54***	3.22	.54
SPMBE AS	.13	.49***	.54***	.19	.08	2.87	.74
SPMBE P	-.23	-.40***	-.35**	-.26*	-.30*	2.02	.98
SPLF	-.24*	-.52***	-.49***	-.52***	-.46***	1.23	.81

Note: \* significance level of .1  
 \*\* significance level of .05  
 \*\*\* significance level of .01  
 n = 49

Similarly, superiors were most satisfied with the focal officer who had transformational, contingent reinforcement (rewards), or management-by-exception (active) leadership

styles. Again, superiors were less satisfied with the leadership of the focal officer who used management-by-exception (passive) or laissez-faire leadership styles.

Unit cohesion and morale, as judged by the superiors, followed the same pattern as above, with transformational, contingent reinforcement (reward), and management-by-exception (active) styles positively correlated to both. Management-by-exception (passive) and laissez-faire styles, as above, were both negatively correlated with unit cohesion and morale. The high relationships of contingent reinforcement (reward) and management-by-exception (active) with both leadership and unit outcomes may suggest the superiors used these styles themselves and looked favorably upon their juniors who used similar styles.

A comparison of Tables 2, 3, and 4 reveals a few notable conflicting perceptions. Management-by-exception (active) was seen as a frequently used style in this sample by subordinates and superiors. However, while subordinates saw no relation between this style and any of the leadership or unit outcomes, superiors rated it as highly related to leader effectiveness and satisfaction with the leader. Additionally, contingent reinforcement (rewards), which came out high in the frequency rating shown in Table 2, had a different relationship to outcomes when evaluated by subordinates as compared to superiors. The data from both sets of observers shows

significant relationships between this style and outcomes (except that subordinates did not relate extra effort to contingent rewards), but the correlations were considerably higher from the superior's point of view. Subordinate notions of contingent rewards were similar to those of contingent promises, unlike superiors who placed a much higher value on the former style.

Charisma was highly valued in most outcomes, and from both points of view, yet not seen as a frequently used style. Finally, the only agreement across all three tables was on the lack of relationship between laissez-faire styles and positive outcomes, and that this style was seen as used least frequently by the leaders in this sample.

From the focal officers' view point described in Table 5, subordinates were willing to exert extra effort for those leaders who saw themselves as using transformational or contingent reinforcement (both promises and rewards) leadership styles. Laissez-faire was negatively related to the effort of subordinates.

Focal officers who saw themselves as transformational also viewed themselves as being more effective as a leader and as more satisfied with their leadership style as compared to leaders with other styles. Again, laissez-faire produced the opposite effect. Transactional leadership styles did not significantly correlate with the leader's perception of his

effectiveness or satisfaction with leadership, unlike their superiors' perceptions. Focal officer judgements of contingent reinforcement (rewards) were similar to contingent reinforcement (promises). This was also seen in the subordinate data while superiors evaluated the styles as very different with respect to outcomes. Focal officers, however, saw either style as related to extra effort, while subordinates did not.

**TABLE 5. CORRELATIONS BETWEEN LEADERSHIP STYLES AND OUTCOMES - SELF**

STYLES	OUTCOMES					MEAN	S.D.
	SFEE	SFEF	SFSAT	RCOHESN	RMORALE		
SFCH	.59***	.61***	.66***	.13	.13	2.75	.63
SFIC	.60***	.53***	.42***	.27**	.13	3.12	.47
SFIS	.40***	.51***	.56***	.24*	.16	2.97	.53
SFIL	.60***	.58***	.38***	.26**	.20	2.74	.50
SFCR1	.32**	.05	.10	.10	.03	2.17	.90
SFCR2	.51***	.19	.16	.25**	.08	3.38	.60
SFMBE A	.16	.13	.02	-.12	-.26**	2.78	.67
SFMBE P	-.004	-.15	-.15	-.23*	-.39***	2.23	.87
SFLF	-.22*	-.45***	-.40***	-.22*	-.17	1.10	.55

Note: \* significance level of .1 n=57  
 \*\* significance level of .05  
 \*\*\* significance level of .01

Transformational leadership styles as viewed by the focal officers, were positively related with their superior's view of unit cohesion. Interestingly, charisma was the exception to this finding, and consistent with subordinates' evaluations if not the superior's. Contingent reinforcement (reward) was also



positively related to unit cohesion (and this was also found in the subordinate and superior data), while laissez-faire and management-by-exception (passive) were negatively related to unit cohesion. There were no significant relationships with subordinates' perceptions of unit cohesion or morale so those data are not shown here.

From the focal officer's perspective, the only influence of leadership style on unit morale as evaluated by the superior, was the negative relationship of management-by-exception (both types) leadership styles to unit morale. It seems curious that there were no statistically significant positive relationship between the focal officer's perception of his leadership styles and the superior's evaluation of unit morale. Of course, this seeming lack of a relationship could simply reflect the difference in perception between the focal officers and their superior. If cohesion and morale were judged from the focal officer's view point, the findings might be more in line with expectations.

As noted in Chapter 3, the peer questionnaire did not permit separating contingent reinforcement and management-by-exception into their two component parts. The peers of the focal officer, as shown in Table 6, viewed both transformational and contingent reinforcement leadership styles as having a positive impact on all three leadership outcomes: 1) extra effort by subordinates, 2) effective

leadership, and 3) satisfaction with leadership. Management-by-exception did not have a significant impact while laissez-faire was consistently negative with respect to leadership outcomes. Like the subordinate and focal officer data, the higher correlations resulted with respect to transformational styles; and, like all observers, high value was placed on charisma.

**TABLE 6. CORRELATIONS BETWEEN LEADERSHIP STYLES AND OUTCOMES - PEER**

STYLES	OUTCOMES					MEAN	S.D.
	PREE	PREF	PRSAT	COHESION	MORALE		
PRCH	.60***	.83***	.85***	.26*	.11	2.63	.76
PRIC	.76***	.58***	.62***	.25*	.18	2.30	.67
PRIS	.70***	.52***	.59***	.04	-.03	2.05	.74
PRIL	.77***	.39***	.41***	.15	.09	1.60	.88
PRCR	.59***	.31**	.39***	.08	.14	2.13	.70
PRMBE	-.01	.16	.18	-.25*	-.13	2.23	.59
PRLF	-.54***	-.57***	-.46***	-.28**	-.03	1.80	.56

Note: \* significance level of .1 n = 52

\*\* significance level of .05

\*\*\* significance level of .01

Unit cohesion, as judged by subordinates, was correlated with charisma and individual consideration, while management-by-exception and laissez-faire leadership styles resulted in a perception of lower unit cohesion. Unit morale, as viewed by the subordinates, was not influenced by any leadership style as seen by the focal officer's peers. However, unit morale, as judged by the superior (not shown on table), was significantly

and negatively related ( $-.24$ ) to laissez-faire; all other relationships with the superior's perception of unit morale were not significant.

Generally, all observers saw transformational leadership as positively related to leadership outcomes; contingent reinforcement (active) was the only transactional style with a consistent, positive relationship to leadership outcomes. A similar relationship existed for unit outcomes but the relationship was stronger and more consistent if leadership styles and unit outcomes were perceived from the same vantage point, e.g., subordinate perceptions of leadership styles related better to subordinate perceptions of unit cohesion and morale than did focal officer perceptions of style compared to superior perceptions of unit outcomes. The laissez-faire style was universally negative in relationship with these two outcomes. Looking at the mean for each perceived leadership style, the focal officers saw themselves as more transformational and less laissez-faire than did others evaluating their leadership styles.

It was interesting to note that subordinates were willing to put out extra effort only for transformational leaders (except individual consideration), with charisma and inspirational leadership as the most productive. This was in contrast with the views of the focal officer and superior, which indicated that contingent reinforcement (rewards) was

also a highly productive style with respect to extra effort. One explanation of this contrast is merely that there were different perceptions between the groups of observers; however, one possible explanation could be differences in expectations. The focal officer and the superior might have lower expectations than the subordinates. Therefore, what they see as "extra effort" is really the fulfillment of what the subordinates see as the "contract" associated with the contingent reinforcement style. It seems odd that the subordinates would have higher expectations of their performance than either the focal officer or his superior.

The relationships between leadership styles and both leadership and unit outcomes were discussed above, but what is the relationship between the two sets of outcomes? Table 7 shows the correlations between leadership outcomes, derived from all four sources, and unit outcomes derived from subordinate and superior questionnaires.

Subordinates' extra effort related to all unit outcome measures, except their own perception of morale, suggesting they did not see a relationship between their willingness to put out extra effort and the morale of their unit. Subordinates' views of unit morale were associated with effective leadership and satisfaction with the focal officer's leadership. From the superior's view point, extra effort by the subordinates was related to unit cohesion, unit morale and

unit performance. Similarly, effective leadership and superior satisfaction with observed leadership were associated with all three unit outcomes.

The focal officers saw subordinates' extra effort and effective leadership as related to unit morale (as judged by subordinates) and unit cohesion (as judged by superiors). Effective leadership was also related to the superior's view of unit morale.

**TABLE 7. CORRELATIONS BETWEEN LEADERSHIP OUTCOMES AND UNIT OUTCOMES**

OUTCOMES	OUTCOMES				
	COHESION	MORALE	RCOHESN	RMORALE	RPERFORM
SBEE	.23*	.20	.30**	.27**	.22*
SBEF	.18	.41***	.21	.17	.14
SBSAT	.16	.31**	.22	.21	.08
SPEE	.08	.07	.60***	.72***	.66***
SPEF	.08	.10	.65***	.61***	.61***
SPSAT	.02	.05	.55***	.55***	.71***
SFEE	.17	.22*	.22*	.06	.01
SFEF		.24*	.32**	.27**	.17
SFSAT	.03	.18	.21	.18	.11
PREE	.16	.09	.08	.03	.03
PREF	.37**	.18	.03	-.08	.11
PRSAT	.30**	.20	-.02	-.22	.02

Note: \* significance level of .1  
 \*\* significance level of .05  
 \*\*\*significance level of .01  
 n = 56

Subordinates' views of unit cohesion were related to leader effectiveness as seen from the peers' perspective as well as

to the peers' satisfaction with the focal officer's leadership style.

The only reasonable comparisons that could be made were between the perceptions of subordinates and superiors, since unit outcomes were judged just from these two view points. Superiors judged a much stronger association between all leader outcomes and all unit outcomes, than did subordinates who only saw relationships between unit cohesion and their extra effort, and unit morale as a function of effective leadership and satisfaction with that leadership.

The results to this point indicate major differences in perceptions of leadership styles and outcomes. Because of the important relationship between subordinates and focal officers and between superiors and focal officers, these differences in perception need to be investigated further.

Table 8 describes the correlations between different perceptions of leadership and leadership outcomes, by looking at the differences in perceived leadership style between subordinates and the focal officers, and between the superior and focal officers. For example, the difference in the perception between subordinates and the focal officer of a particular leadership style was evaluated. These relationships were investigated because subordinates and superiors, far more than peers, are the "significant others" to the focal officers. A leader who perceives himself as having more or

less of a particular style than others perceive in him is the issue addressed here. Differences in perception were defined as others' perceptions minus the focal officer's own perceptions. For example, if the subordinates' average rating of the leader's charisma was 2.5 and the focal officer saw himself as a 3.0, the difference in perception would be  $-.05$ . This difference was then correlated with leadership outcomes to determine if a relationship existed between the two.

The relationship between different perceptions (between subordinates and focal officers) of charisma, inspirational leadership, and intellectual stimulation leadership styles was positively related to subordinate extra effort while contingent promises was negatively related with extra effort.

Different perceptions (between subordinates and focal officers) of leadership style were significantly related to leader effectiveness for all transformational styles and the proactive transactional styles of management-by-exception (active) and contingent reinforcement (rewards). In other words, if the difference in perception for charisma was positive (i.e., the focal officer saw himself as less charismatic than the subordinates saw him), then the leader was seen to be more effective by the subordinates.

The same pattern of results was found concerning subordinates' satisfaction with leadership except that neither individual consideration nor active management-by-exception

were significantly related. Passive management-by-exception was negatively related to satisfaction.

Different perceptions (between superiors and focal officers) of charisma, inspirational leadership, and intellectual stimulation leadership styles were positively related to subordinate extra effort. Additionally, contingent rewards and promises were also related to extra effort.

**TABLE 8. CORRELATIONS BETWEEN DIFFERENT PERCEPTIONS OF LEADERSHIP STYLES AND LEADERSHIP OUTCOMES**

PERCEPTION	SUBORDINATE - SELF			SUPERIOR - SELF		
	SBEE	SBEF	SBSAT	SPEE	SPEF	SPSAT
DIFFCH	.39***	.56***	.58***	.31**	.61***	.60***
DIFFIC	-.11	.29**	.21	.12	.48***	.51***
DIFFIS	.28**	.34**	.42***	.31**	.48***	.58***
DIFFIL	.31**	.35***	.36***	.30**	.53***	.63***
DIFFCR1	-.14	-.07	.02	.25*	.07	.15
DIFFCR2	.09	.23*	.25*	.31**	.48***	.51***
DIFFMBA	.04	.13	.04	.13	.56***	.52***
DIFFMBEP	-.07	-.18	.03	-.10	-.23	-.24*
DIFFLF	.11	-.06	-.08	-.11	-.37***	-.30**

Note: \* significance level of .1  
 \*\* significance level of .05  
 \*\*\* significance level of .01  
 n = 56

Different perceptions (between superiors and focal officers) of leadership style were significantly related to leader effectiveness for all transformational styles and the proactive transactional styles of management-by-exception (active) and contingent reinforcement (rewards). Laissez-faire



was found to be negatively related. The same pattern of results was found concerning superior's satisfaction with leadership except that passive management-by-exception was also negatively related to satisfaction.

These findings suggest that officers who rate themselves below what others rate them on how often they use transformational leadership styles are more likely to be associated with effective leadership than officers who rate themselves above what others rate them.

Bass and Yammarino [Ref. 17:pp. 14-16] suggest that the magnitude of the difference in perception should be negatively related to leadership outcomes. Table 9 shows this relationship between the magnitude (absolute value) of different perceptions and leadership outcomes. Taking the example used above, if the subordinates' average rating for charisma was 2.5 and the focal officer saw himself as a 3.0, then difference in perception would be -0.5, but the magnitude would be +0.5. This difference was then correlated with leadership outcomes to determine if a relationship existed between the two.

Generally, leaders with perceptions that differ from their subordinates or superiors are seen as less effective as a leader by both groups. This is particularly true for the transformational styles.

These findings indicate that self perception is important, contrary to Hersey's suggestion that only subordinates' perceptions of leadership were important in determining the outcomes of leadership [Ref. 16:p. 27]. Bass and Yammarino found that leaders with similar perceptions to that of other observers were seen as more effective, while the findings here suggest that there may be different relationships for negatively viewed leadership styles like passive management-by-exception [Ref. 17:pp. 14-16].

**TABLE 9. CORRELATIONS BETWEEN DIFFERENT PERCEPTIONS OF LEADERSHIP STYLES AND LEADERSHIP OUTCOMES (ABSOLUTE VALUE)**  
OUTCOMES

PERCEPTION	SUBORDINATE - SELF			SUPERIOR - SELF		
STYLE	SBEE	SBEF	SBSAT	SPEE	SPEF	SPSAT
DIFFCH	.03	-.22*	-.35***	.16	-.06	-.06
DIFFIC	-.20	-.18	-.17	.17	-.27*	-.38***
DIFFIS	-.11	-.48***	-.37***	-.11	-.38***	-.52***
DIFFIL	-.18	-.30**	-.25*	-.05	-.49***	-.55***
DIFFCR1	-.11	-.15	.11	.18	.19	.01
DIFFCR2	.02	-.16	-.20	.05	-.25*	-.36***
DIFFMBEA	.10	.07	-.04	-.13	-.13	-.26*
DIFFMBEP	.05	.17	.05	.23	.30**	.29**
DIFFLF	.07	-.17	.07	-.04	-.14	-.14

Note: \* significance level of .1  
 \*\* significance level of .05  
 \*\*\* significance level of .01  
 n = 56

The two tables presented in the appendix show the intercorrelations between the leadership outcomes derived from

all four questionnaires. They illustrate the major differences between each group of observers.

The last question discussed in this study dealt with the importance of military history in the development of military officers. The only significant relationship between either military history variable (self-rated knowledge of history or considered importance of history in officer development) and leadership outcomes was with the focal officer's own view of his effectiveness as a leader and satisfaction with his leadership style. Knowledge of military history was positively related to both effectiveness and satisfaction while the importance of military history was only related to satisfaction. Apparently, focal officers that knew military history also saw themselves as effective leaders.

Table 10 presents the correlations between the focal officers' view of both military history variables and unit outcomes. As shown, only knowledge of military history had any relationship to unit outcomes. It is interesting that this knowledge only related to the subordinates' perception of cohesion and morale and not the superiors' perceptions. This relationship might suggest that leaders with a good knowledge of military history may also realize the importance of unit cohesion and morale, since that is one of the key lessons history teaches, and actively pursue these two unit outcomes.

**TABLE 10. CORRELATIONS BETWEEN MILITARY HISTORY AND UNIT OUTCOMES**

OUTCOMES					
OUTCOMES	COHESION	MORALE	RCOHESN	RMORALE	RPERFORM
I_MILHIS	-.03	.05	.10	-.01	-.02
K_MILHIS	.24*	.28**	.19	.06	.03

Note: \* significance level of .1  
 \*\* significance level of .05  
 \*\*\* significance level of .01  
 n = 56

These findings are far from conclusive and may result from the general lack of knowledge characteristic of the American military officer corps [Ref. 6:pp. 294-296]. Over 50% of the officers surveyed had a "fair" amount or less of knowledge on this subject, while only 21.4% rated their knowledge as "very good." Certainly, this apparent lack of knowledge of military history is surprising for professional military officers.

## **V. CONCLUSIONS AND RECOMMENDATIONS**

### **A. CONCLUSIONS**

The purpose of this thesis was to determine the leadership styles used in the Marine Corps squadrons sampled and to find any relationships that might exist between these styles and positive outcomes as viewed by the leaders, or focal officers, as well as their superiors, peers, and subordinates. The leadership outcomes of subordinate extra effort, leader effectiveness, and satisfaction with the leader were considered in addition to unit outcomes of cohesion and morale. Several themes emerged from the results of this study along with interesting areas for further research.

Despite the small sample size obtained for this research, the results followed the general pattern of findings by Bass [Ref. 3:pp. 11-17], and Yammarino and Bass [Ref. 4:pp. 18-19]. Transformational leadership was found to be most often associated with subordinate extra effort and effective leadership. The transactional styles of contingent reinforcement (reward) and management-by-exception (active) were also associated with effective leadership. Management-by-exception (passive) and laissez-faire styles either were not associated with effective leadership or were related negatively to effective leadership. Thus, similar patterns of

leadership have been seen in samples of Navy and Marine Corps leaders.

While all observers placed a high value on transformational leadership styles, these styles were not perceived as those most frequently utilized by the leaders in these squadrons. One exception to this was the transformational style of individualized consideration, which was rated by all observers as the second most frequently used style in the sample. Oddly enough, however, this was the only transformational style for which subordinates said they did not exert extra effort. Similarly, subordinates saw inspirational leadership as highly related to unit cohesion and morale, but this style was not perceived as one frequently used by the focal leaders.

The data used in this study do not represent cold, hard facts but rather perceptions from different view points. No one perception can claim to represent the "true" picture of the world, but each perception is interesting when considered in the context of its source. Of particular interest were the differences in perceptions among subordinates, superiors, and focal officers. For example, subordinates were willing to put out extra effort *only* for transformational leaders (except for the style of individual consideration), while focal officers and superiors also viewed contingent reinforcement as a highly productive style. Additionally, superiors rated management-by-exception (active) as strongly related to leader

effectiveness and satisfaction with the leader. One area for which there was almost total agreement was that laissez-faire and management-by-exception (passive) leadership styles were not related to positive outcomes, nor were these styles frequently used by leaders from the squadrons.

Subordinates and superiors felt that, in general, cohesion and morale were related positively to transformational leadership and contingent reinforcement (rewards, with subordinates also including promises). Focal leader and peer results showed no relationships between leadership style and positive unit cohesion and morale. Neutral to negative relationships were found between the two styles of management-by-exception (passive) and laissez-faire with respect to cohesion and morale. The finding held for all observers, as mentioned above. The concepts of cohesion and morale are very abstract and the questions used to measure them in this study may not have been optimal for providing clarification.

The final issue of interest in this study concerned the role of knowledge or rated importance of military history with respect to leadership and unit outcomes. This issue has been given considerable attention in writings by military leaders. It cannot be concluded that these data provided strong support for a positive and consistent set of relationships among these factors; neither should such relationships be ruled out. The results showed that leaders who knew military history saw

themselves as effective leaders. Additionally, these leaders may realize the importance of cohesion and morale, since that is one of the key lessons history teaches, and actively pursue these outcomes. A larger sample size may have provided more definitive findings.

## **B. RECOMMENDATIONS**

An interesting question not investigated in this thesis, is whether or not leadership styles change with increased rank. This question would investigate either how the Marine Corps molds its leaders over time, or give some indication of what types of leadership styles the Marine Corps tends to keep. A larger sample size would be required to look at this question.

The results of peer perceptions were not given much emphasis in this study due to problems noted with a questionnaire not totally compatible with that given to other participants, and the fact that "peers" were derived by billet as opposed to rank. While this definition of peer may be acceptable in the civilian community, the rank structure is so important in the military that rank must be the basis for any future survey of peers in this environment.

Researching other units and different types of units would be helpful in determining styles across communities in the Marine Corps. Although unit cohesion and morale are important



to all units, it seems critical to ground combat units. Therefore, a study in this area could prove very interesting and informative.

Different instruments for measuring unit outcomes should be sought to give a more accurate view of cohesion and morale. For example, Griffen's instrument for unit cohesion [Ref. 18] might be useful since it considers both cohesion and bonding. Unit reenlistments might be another measure of unit morale if other, confounding variables could be eliminated. A measure of effectiveness for unit performance can be very illusive since most measures are subject to human judgment and suffer measurement error as a result; and, there is little evidence that peacetime measures are related to wartime performance.

The importance of military history in the development of officers seems obvious enough to be addressed in future research using a larger sample size than that used in the present effort.

The question of the effects of different perceptions of leadership style as they relate to the outcome measures was only briefly addressed in this thesis. Initial results suggest that this area is worthy of further attention.

The results of this thesis indicate that the recommendations made here should be of interest not only to academic researchers, but also to the Marine Corps. Besides

theoretical implications, the results have direct implications for the development of leadership training programs.

## APPENDIX

This section presents information concerning the different perceptions of each group of observers. These two tables emphasize the difference in perception between the observers in this sample and show the intercorrelations between the leadership outcomes derived from each of the questionnaires. The first table presents the relationship between all leadership outcomes and the subordinate and superior leadership outcomes, while the second table presents the relationship between all leadership outcomes and the self and peer leadership outcomes.

Three things stand out from the intercorrelations shown in Tables 9 and 10:

- 1) The intercorrelations between leadership outcomes derived from the same survey were highly correlated with each other, as expected.

- 2) The intercorrelations between leadership outcomes derived from different surveys were generally not significantly correlated with each other, suggesting perceptions vary widely between the groups of observers.

- 3) Exceptions were: subordinates' views of their own extra effort were significantly and positively related to all three leadership outcomes derived from the peer survey and also with

the superior's view of subordinate extra effort. Subordinates' views of leader effectiveness were positively correlated with the superior's view of leader effectiveness. The focal officer's own perception of his effectiveness as a leader was related to the superior's perception of subordinate extra effort. The peers' views of subordinate extra effort were negatively related to the superior's view of leader effectiveness.

There were no correlations between the perceptions of the focal officers and the peers' perceptions indicating the possibility that these two groups of officers saw leadership outcomes very differently. It is interesting the peers' and superiors' sense of subordinate extra effort was related to the subordinates' own view of their extra effort while the focal officers' perception had no relationship.

**TABLE A-1. INTERCORRELATIONS BETWEEN ALL LEADERSHIP OUTCOMES  
AND SUBORDINATE/SUPERIOR OUTCOMES**

OUTCOMES	SBEE	SBEF	SBSAT	SPEE	SPEF	SPSAT	MEAN
SBEE	1.00***	.35***	.36***	.30**	.17	.18	3.20 (.55)
SBEF	.35***	1.00***	.65***	.15	.28**	.24*	3.03 (.47)
SBSAT	.36***	.65***	1.00***	.17	.23*	.16	3.14 (.69)
SPEE	.30**	.15	.17	1.00***	.62***	.56***	3.15 (.57)
SPEF	.17	.28**	.23*	.62***	1.00***	.84***	3.02 (.66)
SPSAT	.18	.24*	.16	.56***	.84***	1.00***	3.26 (.74)
SFEE	.19	.16	.08	.11	-.12	-.11	3.313 (.62)
SFEF	-.12	.10	.05	.31**	.20	.11	3.05 (.57)
SFSAT	-.02	.14	.22	.07	.16	.12	3.24 (.53)
PREE	.26*	-.02	.21	-.10	-.28*	-.09	1.55 (.98)
PREF	.36**	.18	.06	-.06	-.11	.09	2.99 (.61)
PRSAT	.36**	.21	.18	-.13	-.16	.02	2.903 (.90)

Note: \* significance level of .1  
 \*\* significance level of .05  
 \*\*\* significance level of .01  
 n = 56

**TABLE A-2. INTERCORRELATIONS BETWEEN ALL LEADERSHIP OUTCOMES AND SELF/PEER OUTCOMES**

OUTCOMES							
OUTCOMES	SFEE	SFEF	SFSAT	PREE	PREF	PRSAT	MEAN
SBEE	.19	-.02	-.02	.26*	.36***	.36***	3.20 (.55)
SBEF	.16	.10	.14	-.02	.18	.21	3.03 (.47)
SBSAT	.08	.05	.22	.21	.06	.18	3.14 (.69)
SPEE	.11	.31**	.07	-.10	-.06	-.13	3.15 (.57)
SPEF	-.12	.20	.13	-.28*	-.11	-.16	3.02 (.66)
SPSAT	-.11	.11	.122	-.09	.09	.02	3.26 (.74)
SFEE	1.00***	.53***	.46***	.07	.01	.08	3.13 (.62)
SFEF	.53***	1.00***	.58***	-.12	-.02	-.03	3.05 (.57)
SFSAT	.46***	.58***	1.00**	.11	.10	.05	3.24 (.53)
PREE	.07	-.12	.11	1.00***	.51***	.56***	1.55 (.98)
PREF	.01	-.02	.10	.51***	1.00***	.85***	2.99 (.61)
PRSAT	.08	-.03	.05	.56***	.85***	1.00***	2.93 (.90)

Note: \* significance level of .1  
 \*\* significance level of .05  
 \*\*\* significance level of .01

n=49

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