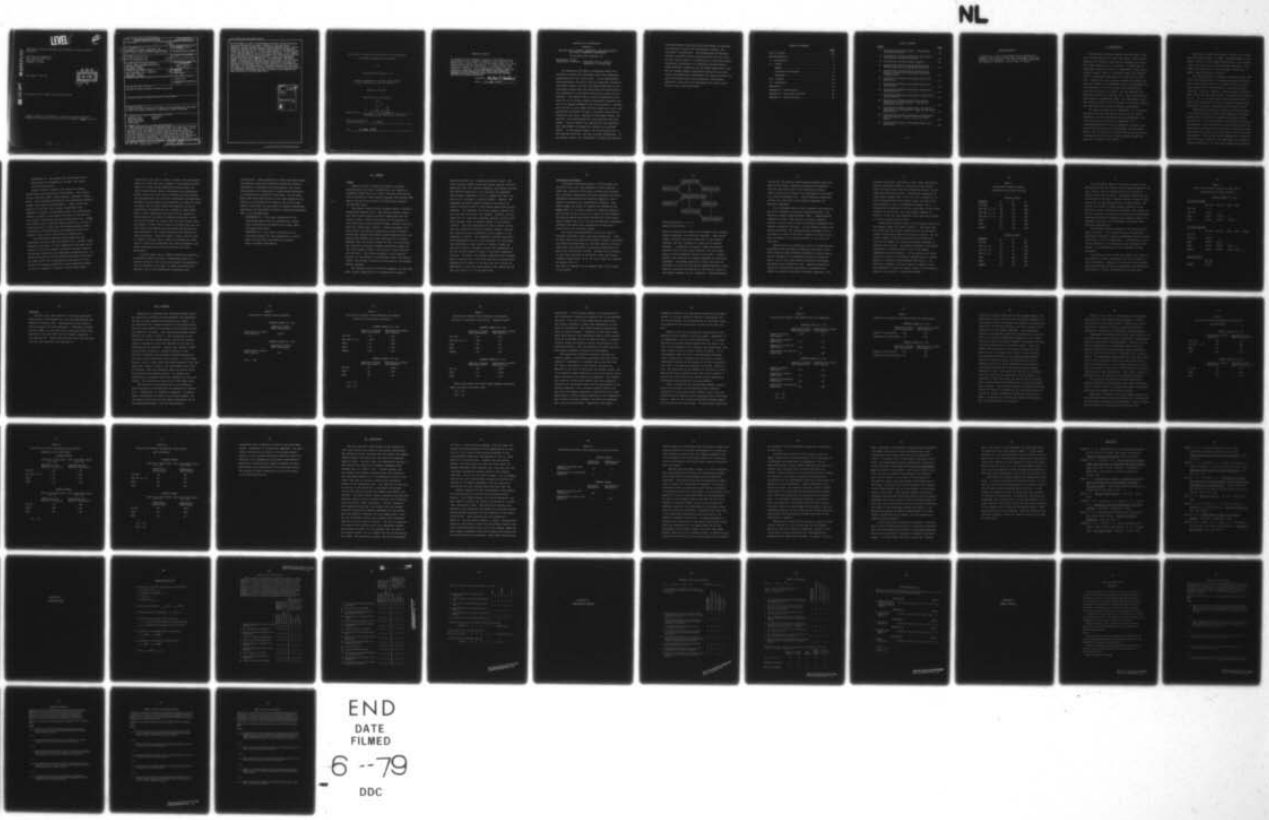
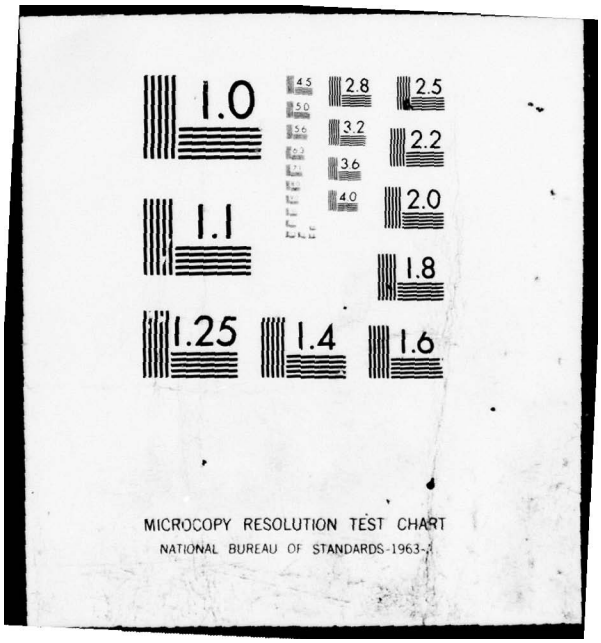
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The Effects of Stress, Experience, and Intelligence on Dyadic Leadership Performance

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An examination was made of leadership dyads--the situation in which two individuals share the leadership responsibilities for a work group. It was hypothesized that performance and morale would be negatively related to intra-dyad stress, and that only under conditions of low intra-dyad stress would the experience and intelligence of the subordinate in the dyad be positively related to performance. Two samples from a military organization were used--one of 50 platoon leaders and platoon sergeants, and one of 45 company commanders and first sergeants. Performance ratings on each leader

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and the leaders as a pair, and performance and morale ratings on the work group were obtained for each dyad. Measures of intra-dyad stress, experience, and intelligence were also obtained from each leader. Partial support was obtained for the hypothesis that performance was negatively related to intra-dyad stress. In the platoon sample, all correlations were in the expected direction, but only two were significant. In the company sample, the subordinate's stress with superior was significantly correlated with performance as expected. The superior's stress with subordinate, however, was unrelated to performance. The hypothesized relationship between intra-dyad stress and group morale was not found. For the platoon sample, no significant correlations between subordinate intelligence or experience and performance under different conditions of intra-dyad stress were found. For the company sample, subordinate experience was positively correlated with performance only under conditions of high intra-dyad stress, and subordinate intelligence positively correlated with performance only under conditions of low intra-dyad stress.

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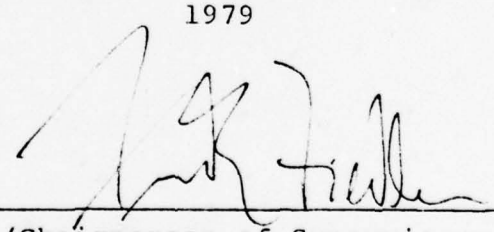
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Abstract

THE EFFECTS OF STRESS, EXPERIENCE, AND INTELLIGENCE ON DYADIC LEADERSHIP PERFORMANCE

By William Allen Knowlton, Jr.

Chairperson of the
Supervisory Committee: Professor Fred E. Fiedler
Department of Psychology

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I. INTRODUCTION

Considerable empirical research has been done in the area of leadership in the past forty years. Most of this research has focused on one type of leadership situation--the single leader and his work group. A second type of leadership situation, however, is prevalent in many organizations, namely, where an individual shares the responsibility of providing leadership to a group with an assistant. Examples of this situation include the manager and assistant manager of a department store, the president and vice-president of a small company, the principal and assistant principal of a school, and the commander and executive officer of a military unit. Such situations are here defined as leadership dyads. An independent literature review (Leister, 1977c) produced no empirical research that addressed this particular dyadic relationship.

Two types of dyads can be identified. In a "superior-dominant" dyad the superior has higher rank or status, experience, and task knowledge than the subordinate, who is in the role of assistant or understudy; in a "subordinate-dominant" dyad the superior is clearly less experienced and has less task knowledge than the subordinate, and the subordinate contributes to the training of the superior, while still at least nominally under the superior's direction and control.

There are at least four possible criteria for evaluating the effectiveness of a dyad: the performance of the dyadic superior, of the dyadic subordinate, of the dyad as a pair, and of the work group whom they supervise. This study will explore the effects of dyadic interaction on each of these performance measures.

One important aspect of dyadic interaction would seem to be intra-dyad stress, the perceived stress and tension felt by each dyadic member as a result of sharing leadership responsibility and functions. If the two leaders cooperate, work well together, handle problems in similar ways, and effectively communicate, intra-dyad stress should be low. If, on the other hand, they constantly clash in their work relationship and have difficulty communicating and working together, intra-dyad stress should be high.

Psychological stress has recently received attention in the organizational behavior and leadership literature, particularly in relation to leader performance and job satisfaction. Buck (1972) defines psychological stress, or job pressure, as a psychological state resulting from the individual's perception that recurring, conflicting forces and incompatible demands are being made on him in his work environment. This concept can be restated as an internal state of tension induced in the individual as a result of perceived demands on him that may be beyond his abilities

to deal with them. Intra-dyad stress clearly is one type of interpersonal stress which acts on a leader in his work environment. Buck (1972) also reports that managers perceive superior-subordinate stress as important to their work relationships.

The effect of stress on performance has not been clear. Some types or levels of stress may improve performance and some decrease it. Lazarus, Deese and Osler (1952) focused on individual differences as moderating the relationship between stress and performance. Lazarus (1966) further listed motivation, ego strength, and emotional and environmental beliefs as moderators of stress, but hypothesized that under conditions of high stress individuals would concentrate on emotional and defensive mechanisms rather than problem-solving abilities. This effect of stress on cognitive processes has also been reported in other studies (Sobley, 1969; Welford, 1974). The most accepted model of the stress-performance relationship is a curvilinear one (McGrath, 1970; Cummings & Croft, 1974; Welford, 1974; Anderson, 1976). Some stress is seen as necessary for optimal performance, but beyond a certain level, stress is detrimental to performance. Intra-dyad stress in this study is based on the perceptions of leaders of stress felt as a result of negative behaviors by the other dyadic member, and hence any intra-dyad stress

perceived is probably beyond the minimum, or moderate level. High intra-dyad stress should therefore be negatively related to dyad performance, and to each leader's overall performance. High intra-dyad stress should also be negatively related to group performance, since the inability of a group's leaders to work together will influence the quality of the control and direction they provide. Thus, the following hypothesis was tested:

HYPOTHESIS I: The greater the intra-dyad stress as perceived by the members of the dyad, the poorer will be leader, dyad, and group performance.

Intra-dyad stress may also affect group morale, which here is defined as an overall feeling of satisfaction by group members with the conditions that impact on the group coupled with a desire to accomplish group objectives despite obstacles or adversity (Motowidlo & Borman, 1977). One factor presumed to affect group morale is the harmony and consensus between its leaders. Group members are usually able to assess their leaders' intra-dyad relationship because of frequent interactions between the leaders and the group. Making the assumption that group members will perceive intra-dyad stress in the same manner as will the leaders, a condition of high intra-dyad stress should negatively impact on the group. It therefore is hypothesized:

HYPOTHESIS II: The greater the intra-dyad stress perceived by the members of the dyad, the poorer will be group morale.

Another question concerns the effects of leader intelligence and experience on performance. Two reviews of the literature (Mann, 1959; Campbell, Dunnette, Lawler & Weick, 1970) produced consistently low correlations between leader intelligence and performance. Csoka (1974) also pointed to the fact that, without considering such moderator variables as leadership style, the relationship between a leader's intelligence and both his own and his work group's performance has been consistently low. Blades and Fiedler (1976) obtained similar results in a study of Army mess halls in which the relationship between leader intelligence and performance was moderated by both the leader's style and his motivation to perform well.

The relationship between leader experience and performance has also been consistently low. Fiedler (1970) reported the results of three experiments and seven field studies in which the median correlation between years of supervisory experience and leadership performance was -.12. Fiedler and Leister (1977a) followed up earlier work done by Csoka (1974) and conceptualized intelligence as the ability to integrate experience, while experience served as one of a number of "screens" through which leader

intelligence must pass in order to affect task performance. Stress with boss was also included in the multiple screen model as a screen whose permeability would affect the relationship between leader intelligence and performance. Potter (1978) took this line of thought one step further, and suggested that not only did intelligence and experience interact in their effect on performance, but that the level of stress with the boss would also moderate the use of intelligence and experience by a leader or staff member. Potter (1978) summarized the results of his studies of staff personnel and those of Fiedler and Leister (1977a) on military leaders by showing that for both groups, when the leader's stress with his boss or superior was very low, that leader intelligence was positively correlated with task performance, and leader experience was unrelated to task performance. When the leader's stress with his boss or superior was very high, leader intelligence was unrelated or negatively correlated with task performance, and leader experience positively correlated with task performance.

It would appear that in dyadic leadership situations, intra-dyad stress could have a moderating effect on a leader's effective use of his intelligence and experience. For the superior in the dyad, it might also affect his effective use of the subordinate's experience and

intelligence. Under conditions of high intra-dyad stress, the superior might have difficulty benefiting from his subordinate's experience and intelligence, but rather could perceive an intelligent or experienced subordinate as threatening his control of the group. On the other hand, when intra-dyad stress is low, there should be few barriers to the superior's effective use of his subordinate's abilities, and the result of greater subordinate experience and intelligence should be improved performance. Thus, it is hypothesized:

HYPOTHESIS III: Only under conditions of low intra-dyad stress will the subordinate's experience be positively correlated with leader, dyad, and group performance.

HYPOTHESIS IV: Only under conditions of low intra-dyad stress will the subordinate's intelligence be positively correlated with leader, dyad, and group performance.

II. METHOD

Sample

Because of the prevalence of dyads in military organizations, and their accessibility, two samples of leadership dyads were drawn from a military organization: one of 50 platoon leader-platoon sergeant (PLT LDR-PLT SGT) pairs, and one of 45 company commander-first sergeant (CO CDR-1SG) pairs.

The platoon leader-platoon sergeant dyad is clearly a subordinate-dominant dyad. The platoon sergeant always will have greater general military experience than the platoon leader, usually having been in the military at least five years, where platoon leaders normally will have less than three years' service. Platoon sergeants also have greater job specific experience in most instances, having been subordinate leaders (squad leaders) within the platoon and probably with more experience as a platoon sergeant than the platoon leader has had in his position. The positions of platoon sergeant and platoon leader are also very closely related, and overlap in many functions and job tasks. The platoon sergeant is in a superior position to all members of the platoon except the platoon leader, and assumes leadership of the group in the platoon leader's absence.

The company commander and first sergeant, on the other hand, cannot unequivocally be categorized as either a

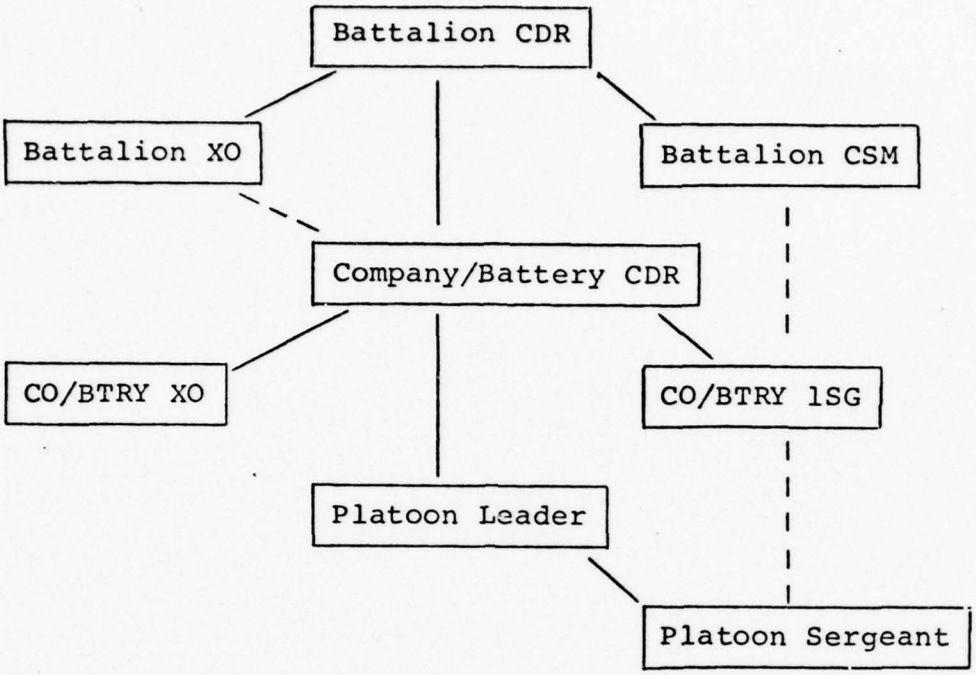
superior-dominant or a subordinate-dominant dyad. The first sergeant almost always has greater general military experience than the company commander, and usually has more job specific experience in his job than the commander (most company commanders serve in command only once, and only up to a maximum of eighteen months). However, the commander and first sergeant roles are not nearly as closely linked as those of the platoon leader and platoon sergeant. The commander and first sergeant together control the same work group, the company. However, the commander is in a relatively stronger position vis-a-vis the first sergeant than the platoon leader to his platoon sergeant. The first sergeant also has no formal control over the executive officer and platoon leaders, and does not assume the entire leadership of the company in the commander's absence. The commander, although relatively less experienced than the first sergeant, has had leadership experience in most cases as a platoon leader and executive officer, and does not have the disadvantage of the new platoon leader of being in his first leadership position. In effect, the company commander-first sergeant dyad is neither one in which the superior is training the subordinate to assume his own job, nor one in which the subordinate is the more experienced in all aspects of the job, but rather is a transitional dyad.

Instrument Development

To measure intra-dyad stress, a 25-item scale was developed from items from Stogdill's (1963) LBDQ XII. Items were selected on the basis of their face validity for a military organization and their relevance for both a subordinate evaluating his superior's behavior, and a superior evaluating his subordinate's behavior. Each dyadic member was asked to indicate how frequently the other member of the dyad engaged in a specific behavior and how much stress he felt as a result of this behavior. The Spearman-Brown split-half reliability of the stress scales ranged from .84 to .98 for the different subsamples, therefore the scales were interpreted as measuring a global factor of intra-dyad stress.

Four eight-item performance scales were used to evaluate individual, dyad, and group performance. Items on these scales were selected by expert judges as essential for effective performance in a military setting, and most items were used previously in military organizations by Bons (1974) and Leister (1977a). Varimax factor analysis of each scale resulted in one factor, with item factor loadings ranging from .29 to .98, with almost all loadings at greater than .50.

The chain of command for the samples used in this study is as follows:



Direct Supervisor ————————

Indirect Supervision – – – –

Platoon sergeants were rated by the company first sergeant, company commander, and battalion commander. The platoon leader, although the direct supervisor of the platoon sergeant, was not included as a rater of the platoon sergeant. A comparison of platoon leader and platoon sergeant could not have been objective with one contributing to the performance rating of the other. Platoon leaders were rated by the company commander and battalion commander. The company executive officer (XO) was not included as a rater of the platoon leaders because in many units he functions the majority of the time as a peer of the platoon leaders, not as a superior. Dyad performance

ratings for the platoon leader-platoon sergeant dyad were made by the company commander and battalion commander, with the same items used as for individual ratings, except evaluation was made of the performance of the dyad as a single leadership unit. Group (platoon) performance ratings were also made by the company commander and battalion commander.

In an analogous manner, first sergeants were rated by battalion commanders, battalion executive officers, and battalion command sergeants-major (CSM). Company/battery commander ratings, dyad ratings, and group (company/battery) ratings were all made by battalion commanders and battalion executive officers. As with platoon leaders and platoon sergeants, the company/battery commander was not included as a rater of the first sergeant in order to not have one member of the dyad contribute to the rating of the other.

Group morale was measured by a series of behaviorally-anchored scales developed by Motowidlo and Borman (1977). These scales measure different components of group morale, and are designed to be completed by raters outside the group. Six of the eight scales formulated by Motowidlo and Borman were selected for use: superior-subordinate relations; teamwork and cooperation; performance and effort; reactions to adversity; bearing, appearance, and

military discipline; and pride in unit, Army, and country. Scales evaluating community relations and use of time during off-duty hours were not considered relevant to this study and thus were not used. Reliability estimates for these scales ranged from .34 to .70, with a median of .55, and the reliability of the overall score, the sum of all eight subscales, was .72 (Motowidlo & Borman, 1977). A varimax factor analysis of the six items used in this study resulted in one factor, with item factor loadings of between .52 and .84, and therefore item scores were summed to form an overall morale score.

Correlations between raters for the platoon sample and the company sample are shown in Table 1. The three sets of ratings for the platoon sergeants and first sergeants reflect correlations between each pair of raters. For the platoon sample, interrater reliability is sufficiently high for all except the ratings of platoon sergeants to average rating scores. For platoon sergeants, the highest correlation is between raters 2 and 3, the company commander and first sergeant. On the grounds that these raters are closer to the platoon sergeant and in a better position to observe his performance than rater 1, the battalion commander, only the ratings of raters 2 and 3 were averaged to obtain an overall rating for the platoon sergeant, with rater 1's ratings discarded.

Table 1

Correlations Between Raters:

Performance and Morale Ratings

PLATOON SAMPLE

RATINGS	r	N	p
PLT LDR	.61	49	.001
PLT SGT (1 & 2)	.38	50	.006
PLT SGT (1 & 3)	.23	50	.106
PLT SGT (2 & 3)	.45	50	.001
PAIR	.56	49	.001
UNIT	.43	50	.002
MORALE	.33	49	.019

COMPANY SAMPLE

RATINGS	r	N	p
CO CDR	.74	41	.001
1SG (1 & 2)	.30	41	.056
1SG (1 & 3)	.23	43	.136
1SG (2 & 3)	.28	41	.081
PAIR	.57	38	.001
UNIT	.71	45	.001
MORALE	.16	38	.331

For the company sample, interrater reliability was sufficiently high for ratings of the company commander, the pair, and the unit to average each set of ratings to obtain overall rating scores. Interrater reliability for the ratings of the first sergeant and for ratings of unit morale was not sufficiently high to average scores, and without any reason to assume greater accuracy of any particular rater, ratings were discarded. The reason for the low interrater reliability on some of the performance and morale ratings is probably that different raters, in different positions, view performance and morale from different perspectives.

Correlations between ratings for the same rater are shown in Table 2. All correlations are statistically significant and show a high correspondence between ratings, indicating a lack of independence. A sufficient per cent of the variance in the ratings was left unaccounted for, however, to justify examining the individual ratings separately.

Of particular note is, for all raters, the rating of unit morale is highly correlated with that of leader or unit performance. Apparently, those units which perform well are perceived as having high morale, and those whose performance is poorer are perceived as having lower

Table 2

Correlations Between Ratings by Same Rater:

Performance and Morale Ratings

PLATOON SAMPLE (N = 50)

BN CDR'S RATINGS

	PLT LDR	PLT SGT	PAIR	UNIT
PLT LDR	---			
PLT SGT	.39**	---		
PAIR	.83***	.73***	---	
UNIT	.73***	.62***	.79***	---

CO CDR'S RATINGS

	PLT LDR	PLT SGT	PAIR	UNIT	MORALE
PLT LDR	---				
PLT SGT	.63***	---			
PAIR	.90***	.83***	---		
UNIT	.63***	.62***	.65***	---	
MORALE	.66***	.60***	.67***	.81***	---

1SG'S RATINGS

	PLT SGT
MORALE	.70***

Table 2 (Cont.)

COMPANY SAMPLE (N = 45)

BN CDR'S RATINGS

	CO CDR	1SG	PAIR	UNIT
CO CDR	---			
1SG	.43**	---		
PAIR	.82***	.73***	---	
UNIT	.78***	.60***	.77***	---

BN XO'S RATINGS

	CO CDR	1SG	PAIR	UNIT	MORALE
CO CDR	---				
1SG	.34*	---			
PAIR	.80***	.75***	---		
UNIT	.76***	.57***	.82***	---	
MORALE	.72***	.51***	.73***	.83***	---

BN CSM'S RATINGS

	1SG
MORALE	.40*

*p < .05

**p < .01

***p < .001

morale. This effect is probably due to the behavioral-anchoring of the morale scales.

Two different experience measures were obtained: job specific experience and general military experience. Job specific experience was defined as time in the position or similar leadership positions (for example, number of months' experience as a platoon sergeant). General military experience was defined as time in active military service. Intelligence was measured using the Wonderlic Personnel Test. The Wonderlic was adapted from the Otis Self-Administering Tests of Mental Ability, and is a timed, 50-item test of verbal and quantitative ability. Immediate test-retest reliabilities of .82 to .94 have been reported for samples from industrial populations, and internal consistency estimates range from .88 to .94 (Guion, 1965). The Wonderlic emphasizes verbal cognitive factors such as verbal comprehension, deduction, and numerical fluency, and has the advantage over other tests of general intellectual ability such as the Wechsler Adult Intelligence Scale in that it does not require a lot of time or expense to administer. Guion (1965) reports that the Wonderlic has been extensively validated as a measure of general mental ability.

Procedure

For each case, both members of the dyad completed a questionnaire (see Appendix A), and were administered the Wonderlic Personnel Test. Questionnaires were coded to insure anonymity of the respondents. Performance ratings of each leader, of the dyad, and of the group (unit) were obtained at the same time from the leaders' superiors (see Appendix B). Group morale ratings were also obtained from the same superiors (see Appendix C).

III. RESULTS

Hypothesis I predicted that intra-dyad stress would be negatively correlated with performance, and Hypothesis II made the same prediction concerning unit morale. It was expected that a combined measure of intra-dyad stress could be used, based on an average of scale scores for the two members of the dyad. The correlations between stress measures are shown in Table 3. The correlation is not significant for the company sample, and for the platoon sample a maximum of 25% of the variance in one score is accounted for by the other. Rather than average a dyad's stress scores to obtain a combined measure, it was decided to correlate the dependent variables separately with each of the individual stress scores. It also seems, however, that in those cases where both members of the dyad agree that stress is high or low (individual scores split at medians), that less ambiguity about the actual nature of the dyadic relationship exists. To examine this possibility, on-quadrant cases were selected out from the samples, and correlations also run for only these cases.

The results of the correlations of the different stress measures with performance are presented in Tables 4 and 5. Hypothesis I is partially supported. As Table 4 shows, considering all cases in the platoon sample, for intra-dyad stress seven of the eight correlations are in the expected direction, with two statistically

Table 3

Correlations Between Stress Measures

PLATOON SAMPLE (N = 50)

	Superior's Stress With Subordinate
Subordinate's Stress With Superior	.52***

COMPANY SAMPLE (N = 45)

	Superior's Stress With Subordinate
Subordinate's Stress With Superior	.26

***p < .001

Table 4

Correlations Between Stress Measures and Average Ratings of Performance and Morale

PLATOON SAMPLE (N = 50)

	Superior's Stress With Subordinate	Subordinate's Stress With Superior
PLT LDR	.09	-.27
PLT SGT (2 & 3)	-.39**	-.22
PAIR	-.07	-.29*
UNIT	-.13	-.22
MORALE	-.22	-.15

COMPANY SAMPLE (N = 45)

	Superior's Stress With Subordinate	Subordinate's Stress With Superior
CO CDR	.13	-.40**
PAIR	.01	-.33*
UNIT	.15	-.29

*p < .05

**p < .01

Table 5

Correlations Between Stress Measures and Average Ratings of Performance and Morale: Selected Cases[a]

PLATOON SAMPLE (N = 30)

	Superior's Stress With Subordinate	Subordinate's Stress With Superior
PLT LDR	-.11	-.26
PLT SGT (2 & 3)	-.42*	-.27
PAIR	-.24	-.31
UNIT	-.28	-.31
MORALE	-.23	-.16

COMPANY SAMPLE (N = 22)

	Superior's Stress With Subordinate	Subordinate's Stress With Superior
CO CDR	.02	-.64**
PAIR	-.14	-.49**
UNIT	.03	-.47*

[a]Only those cases where both dyadic members perceived stress as high or low were used.

*p < .05

**p < .01

significant. In the company sample, all correlations of the subordinate's stress with superior are in the expected direction, with two of three statistically significant. The company commander's stress with subordinate is unrelated to performance, with slight positive correlations with all three variables. Selection of only those cases where both superior and subordinate agree on their perceptions of intra-dyad stress, as shown in Table 5, produces slightly higher correlations and all correlations in the expected direction, with the exception of those involving the company commander's stress with subordinate.

The significant negative correlation between the platoon leader's stress with subordinate and the platoon sergeant's performance is probably due to the fact that the rater's evaluations of the platoon sergeant are affected by how well he works with the platoon leader, and if the platoon leader perceives a lot of intra-dyad stress, these evaluations are liable to be negative. The significant negative correlations between the first sergeant's perception of intra-dyad stress and the performance of the company commander, pair, and unit probably reflect the fact that the company commander's raters observe the same undesirable or stress-causing behaviors on the commander's part as does the first sergeant, and rate the commander, pair, and unit accordingly. Apparently, the company

commander himself is not accurately perceiving intra-dyad stress, or is less concerned with his relationship with his first sergeant, as his perception of intra-dyad stress is unrelated to his performance or that of the pair and unit.

Tables 4 and 5 also present the correlations of the different stress measures with unit morale. Hypothesis II is unsupported, as none attain significance. It is probable that intra-dyad stress accounts for too small a portion of the variance in unit morale to be significant, with other factors having a greater effect on morale. It is also possible that the use of the Motowidlo and Borman (1977) scales where evaluation of unit morale is made by individuals external to the group may not have resulted in this case in an accurate assessment of morale. Additionally, the perception of the members of the group of intra-dyad stress may be different than that of the leaders, a possibility that could not be tested without measures of intra-dyad stress obtained from group members.

Prior to examining the relationship between intelligence and experience and performance under different conditions of intra-dyad stress, Tables 6 and 7 show the correlations of experience and intelligence with intra-dyad stress. Three of the sixteen correlations between experience and stress are significant. In the platoon sample the

Table 6

Correlations Between Intra-Dyad Stress and Experience

PLATOON SAMPLE (N = 50)

	Superior's Stress With Subordinate	Subordinate's Stress With Superior
Superior General Experience	.39**	.24
Subordinate General Experience	.15	-.11
Superior Job Specific Experience	.07	.20
Subordinate Job Specific Experience	.26	.20

COMPANY SAMPLE (N = 45)

	Superior's Stress With Subordinate	Subordinate's Stress With Superior
Superior General Experience	-.16	.06
Subordinate General Experience	.11	-.35*
Superior Job Specific Experience	.03	.20
Subordinate Job Specific Experience	-.09	-.35*

*p < .05

**p < .01

Table 7

Correlations Between Intra-Dyad Stress and Intelligence

PLATOON SAMPLE (N = 50)

	Superior's Stress With Subordinate	Subordinate's Stress With Superior
Superior Intelligence	.09	-.14
Subordinate Intelligence	.06	-.18

COMPANY SAMPLE (N = 45)

	Superior's Stress With Subordinate	Subordinate's Stress With Superior
Superior Intelligence	-.12	.01
Subordinate Intelligence	-.05	-.28

greater the general experience of the platoon leader, the more stress he will perceive with his platoon sergeant; in the company sample, the greater the general or job specific experience of the first sergeant, the less stress he will perceive with the company commander. The significant results in the platoon sample are probably due to the fact that as the platoon leader gains experience, he is less willing to allow the platoon sergeant to dominate the dyad, and hence perceives more intra-dyad stress. Also, the greater the experience of the platoon leader, the more likely he is to be leading his second or third platoon. The significant results in the company sample probably reflect the greater control and confidence the first sergeant gains as he gains experience, and his ability with greater experience to define his and the company commander's roles, and insure that they do not interfere with each other in the performance of their duties. A commander is also more likely to rely on and try to maintain a close working relationship with a more experienced first sergeant. The different results obtained for the two samples in respect to experience and intra-dyad stress can be seen to reflect differences between the two types of dyads. No significant correlations between intelligence and intra-dyad stress were obtained.

Tables 8 and 9 show the correlations of subordinate experience and intelligence with performance, without controlling for intra-dyad stress. Results are all non-significant, showing no overall relationship between subordinate experience or intelligence and performance.

Hypothesis III predicted that only under conditions of low intra-dyad stress would the subordinate's experience be positively correlated with performance. Tables 10 and 11 show the correlations of subordinate general and job specific experience with performance under conditions of high or low intra-dyad stress. Hypothesis III is unsupported. No significant correlations are found under conditions of low intra-dyad stress, and under conditions of high intra-dyad stress, in the company sample the subordinate's job specific experience is significantly positively correlated with pair performance. This result, counter to Hypothesis III, is examined in the discussion section.

No significant correlations between subordinate general experience and performance were found under conditions of either high or low intra-dyad stress, and general experience was dropped from further analysis.

Hypothesis IV predicted that only under conditions of low intra-dyad stress would the subordinate's intelligence be positively correlated with performance. Table 12 shows the correlations of subordinate intelligence with

Table 8

Correlations Between Subordinate Experience and Performance

PLATOON SAMPLE (N = 50)

	Subordinate General Experience	Subordinate Job Specific Experience
PLT LDR	.18	.11
PLT SGT (2 & 3)	-.16	-.09
PAIR	.07	.07
UNIT	-.02	-.12

COMPANY SAMPLE (N = 45)

	Subordinate General Experience	Subordinate Job Specific Experience
CO CDR	.20	-.03
PAIR	-.03	-.06
UNIT	.01	-.11

Table 9

Correlations Between Subordinate Intelligence and Performance

	PLATOON SAMPLE (N = 47) Subordinate Intelligence
PLT LDR	.12
PLT SGT (2 & 3)	-.02
PAIR	.15
UNIT	.06

	COMPANY SAMPLE (N = 44) Subordinate Intelligence
CO CDR	.03
PAIR	.12
UNIT	.09

Table 10

Correlations Between Subordinate General Experience and Performance

PLATOON SAMPLE

	High Intra-Dyad Stress (N = 15)	Low Intra-Dyad Stress (N = 14)
	Subordinate General Experience	Subordinate General Experience
PLT LDR	-.07	-.12
PLT SGT (2 & 3)	-.12	-.39
PAIR	-.05	-.26
UNIT	-.23	-.24

COMPANY SAMPLE

	High Intra-Dyad Stress (N = 9)	Low Intra-Dyad Stress (N = 13)
	Subordinate General Experience	Subordinate General Experience
CO CDR	.35	.23
PAIR	.22	-.07
UNIT	.13	-.38

Table 11

Correlations Between Subordinate Job Specific Experience and Performance

PLATOON SAMPLE

	High Intra-Dyad Stress (N = 15)	Low Intra-Dyad Stress (N = 14)
	Subordinate Job Specific Experience	Subordinate Job Specific Experience
PLT LDR	-.28	-.14
PLT SGT (2 & 3)	-.21	-.26
PAIR	-.21	-.20
UNIT	-.19	-.29

COMPANY SAMPLE

	High Intra-Dyad Stress (N = 9)	Low Intra-Dyad Stress (N = 13)
	Subordinate Job Specific Experience	Subordinate Job Specific Experience
CO CDR	.51	.00
PAIR	.66*	-.09
UNIT	.39	-.20

*$p < .05$

Table 12

Correlations Between Subordinate Intelligence and Performance

PLATOON SAMPLE

	High Intra-Dyad Stress (N = 14)	Low Intra-Dyad Stress (N = 14)
	Subordinate Intelligence	Subordinate Intelligence
PLT LDR	.25	.40
PLT SGT (2 & 3)	.10	.30
PAIR	.45	.25
UNIT	.33	.54

COMPANY SAMPLE

	High Intra-Dyad Stress (N = 8)	Low Intra-Dyad Stress (N = 13)
	Subordinate Intelligence	Subordinate Intelligence
CO CDR	.06	.71**
PAIR	-.04	.78**
UNIT	.24	.51

*p < .05

**p < .01

performance under conditions of high or low intra-dyad stress. Hypothesis IV is partially supported. No significant correlations are found in the platoon sample. However, in the company sample the expected results are obtained, with subordinate intelligence significantly positively correlated with company commander and pair performance under conditions of low intra-dyad stress. The results of these correlations are also discussed in the following section.

IV. DISCUSSION

The most important implications of the findings of this study concern the nature of the dyadic relationship. The different results obtained from the platoon and company samples support the assumption that there are different types of dyads. Possibly there is insufficient overlap in job functions to consider the company commander-first sergeant pair as a dyad at all. In both samples, the pair ratings were highly correlated with the ratings of the individual leaders, so it is difficult to tell if the raters were able to actually evaluate the individual leaders as one leadership unit. One indicator of the lack of overlap in job functions is the amount of personal contact the raters had with the leaders individually and together. For both samples, raters indicated that they had personal contact with the leaders together less frequently than with either leader separately. However, comparing the frequency of personal job contact with the leaders' immediate supervisors (company commander for the platoon pair and battalion commander for the company pair), both saw the subordinate leader only slightly more frequently than they saw the leaders together. The lack of agreement of raters on the evaluations of the subordinate leaders also provides support for the argument that, at least in the company sample, the two leaders may not be functioning as a dyad. For the platoon sample, the lack of agreement

of rater 1, the battalion commander, with the other two raters of platoon sergeants can be explained by the fact that he is two levels above platoon sergeants in the organizational structure, and probably is not in a good position to evaluate them. However, for the platoon sample, all three raters are only one level above the company commander-first sergeant pair, yet there was high interrater reliability between raters of the company commander, but not for the first sergeant. It is probable that had not pair ratings been so highly correlated with ratings of the company commander, that the interrater reliability for pair ratings would also have been low.

Another indicator of the relationship of the members of the dyad might be found in the intra-dyad stress measure. Each leader (except for platoon sergeants) was also asked to indicate his overall job stress on a single item, seven-point scale. The correlation between this measure of job stress and the measure of intra-dyad stress should provide information on the closeness of the dyadic relationship. These correlations are presented in Table 13. For the platoon sample, a slight, nonsignificant positive correlation is shown for the platoon leader's job stress and intra-dyad stress, and in the company sample for both company commanders and first sergeants job stress and intra-dyad stress are unrelated. While these correlations

Table 13

Correlations Between Intra-Dyad Stress and Job Stress

PLATOON SAMPLE

	Superior's Job Stress	Subordinate's Job Stress
Superior's Stress With Subordinate	.17	--
Subordinate's Stress With Superior	--	--

COMPANY SAMPLE

	Superior's Job Stress	Subordinate's Job Stress
Superior's Stress With Subordinate	.01	--
Subordinate's Stress With Superior	--	-.02

cannot support the conclusion that for platoon leaders and platoon sergeants the dyadic relationship is a close one, they certainly indicate that for company commanders and first sergeants, the relationship cannot be a close one, or for both leaders intra-dyad stress would be correlated with job stress.

Keeping these findings in mind, it is not surprising that the hypothesis concerning the relationship between intra-dyad stress and performance was only partially supported. Intra-dyad stress was not perceived as important to either the subordinate or superior in the dyad, a conclusion which is supported by the lack of correlation of intra-dyad stress with job stress. It would then not be expected to have a noticeable effect on job performance. At least in the company sample, even when for the first sergeant intra-dyad stress is the same as stress with immediate superior, the correlation of intra-dyad stress with job stress is negligible. Stressors other than that in the intra-dyad relationship must be acting on the leaders to generate job stress. It seems reasonable to conclude that the nature of the dyadic relationship determines the importance of intra-dyad stress to the job performance of the dyadic leaders and their work group. Further research done on different dyads, in which not only intra-dyad stress but also all other aspects of job stress

are examined, would undoubtedly provide more information in this area.

A second major finding of this study is that the dyadic leadership situation moderates the relationship of intelligence and experience to performance. As was mentioned earlier, Potter (1978) summarized the results of studies that indicated that for both staff and line leaders, under conditions of high stress with boss (immediate superior) the leader's experience was positively correlated with his performance, while his intelligence was unrelated to his performance. Under conditions of low stress with boss, the opposite occurred, and the leader's intelligence was positively correlated with his performance, while his experience was unrelated to his performance. In the dyadic leadership situation, the subordinate's perception of intra-dyad stress is really stress with boss, since the other member of the dyad is also his immediate superior, so one would expect the same relationship between the subordinate's stress with boss and his performance to emerge.

Examining the results of this study in light of these earlier findings, it can be seen that for the company sample the role of stress as a moderator variable in the relationship between experience and intelligence and performance has again been obtained. As Tables 11 and 12

show, experience is positively correlated with performance only under conditions of high intra-dyad stress, and intelligence only under conditions of low intra-dyad stress. It appears that in some dyadic leadership situations, the relationship between intelligence, experience, stress with boss, and leader performance for the subordinate is similar to that found in the single leader situation, and that the effect also extends to the performance of the superior in the dyad, the performance of the dyad as a pair, and even possibly the performance of the group. The reason why the relationship that emerged in the company sample was not also present in the platoon sample is not clear. Both platoon leaders and platoon sergeants reported more intra-dyad stress than did company commanders and first sergeants (mean intra-dyad stress of 36.17 and 39.09 versus 32.22 and 33.73) and this difference may relate to the divergence between the samples. The differences between the dyadic relationships in the two samples undoubtedly has an impact, but the problem will require further analysis.

A final note about causality is necessary. With the use of only correlational analysis it can only be inferred that high intra-dyad stress leads to decreased performance, and not poor performance leading to increased intra-dyad stress. It seems likely that this is the case, however,

due to the basis of the measurement of intra-dyad stress in behaviors of the other dyadic leader. It also seems unlikely that if poor performance were the basis of intra-dyad stress, that the correlation between the subordinate's stress with superior and the superior's stress with subordinate would be so low ($r = .26$) for the company sample, or that one stress measure would be significantly negatively correlated with performance, and the other unrelated to it.

Some areas for further research are suggested by this study. A further examination of different dyads, in both military and civilian organizations would provide a better idea of exactly how leadership dyads function. Is job overlap an important factor in determining the closeness of the dyadic relationship? Do individual differences in leadership style have an effect on the performance of the dyad? What are the limits outside of which the interaction of two leaders can no longer be considered dyadic? These are questions yet to be answered. However, hopefully this study has provided a basis for research which will be able to answer them.

REFERENCES

Anderson, C. R. Coping behavior as intervening mechanism in the inverted U stress performance relationship. Journal of Applied Psychology, 1976, 61, 30-34.

Blades, J. W., & Fiedler, F. E. The influence of intelligence, task ability, and motivation on group performance (Tech. Rep. 76-78). Seattle: University of Washington, Organizational Research Laboratory, January 1976.

Bons, P. M. The effect of changes in leadership environment on the behavior of relationship- and task-motivated leaders. Unpublished doctoral dissertation, University of Washington, 1974.

Buck, V. E. Working under pressure. New York: Crane, 1972.

Campbell, J. P., Dunnette, M. D., Lawler, E. E., & Weick, K. E. Managerial behavior, performance, and effectiveness. New York: McGraw-Hill, 1970.

Csoka, L. W. A relationship between leader intelligence and leader effectiveness. Journal of Applied Psychology, 1974, 59, 43-47.

Cummings, R. W., & Croft, P. G. Human information processing under varying task demand. In A. T. Welford (Ed.), Man under stress. New York: Wiley, 1974.

Fiedler, F. E. Leadership experience and leader performance--Another hypothesis shot to hell. Organizational Behavior and Human Performance, 1970, 2, 15-21.

Fiedler, F. E., & Leister, A. F. Leader intelligence and task performance: A test of a multiple screen model. Organizational Behavior and Human Performance, 1977, 20, 1-14. (a)

Fiedler, F. E., & Leister, A. F. The effects of stress with the boss on the relationship between intelligence and experience with performance. Paper presented at the meeting of the Western Psychological Association, Seattle, April, 1977. (b)

Guion, R. M. Personnel testing. New York: McGraw-Hill, 1965.

Johnson, P. O., & Bledsoe, J. C. Morale as related to perceptions of leader behavior. Personnel Psychology, 1973, 26, 581-592.

Lazarus, R. S. Psychological stress and the coping process. New York: McGraw-Hill, 1966.

Lazarus, R. S., Deese, R. S., & Osler, S. F. The effects of psychological stress upon performance. Psychological Bulletin, 1952, 49, 292-317.

Leister, A. F. An investigation of the effects of superior stress. Unpublished master's thesis, University of Washington, 1977. (a)

Leister, A. F. Leader stress, leader performance and the contingency model of leadership effectiveness. Unpublished manuscript, University of Washington, 1977. (b)

Leister, A. F. Personal communication, 1977. (c)

Mann, R. D. A review of the relationships between personality and performance in small groups. Psychological Bulletin, 1959, 56, 241-270.

McGrath, J. E. A conceptual formulation for research of stress. In J. E. McGrath (Ed.), Social and psychological factors of stress. New York: Holt, Rinehart, and Winston, 1970.

Motowidlo, S. J., & Borman, W. C. Behaviorally anchored scales for measuring morale in military units. Journal of Applied Psychology, 1977, 62, 177-183.

Potter, E. H. The effects of experience on the job performance, job satisfaction and stress of staff personnel. Unpublished master's thesis, University of Washington, 1977.

Potter, E. H. The contribution of intelligence and experience to the performance of staff personnel. Unpublished doctoral dissertation. University of Washington, 1978.

Sobley, C. M. Effects of stress on perceptual attention. In B. P. Rouke (Ed.), Exploration in the psychology of stress and anxiety. Ontario: Longmans Canada, 1969.

Stogdill, R. M. Manual for the Leader Behavior Description Questionnaire-Form XII. Columbus: Ohio State University, Bureau of Business Research, 1963.

Welford, A. T. Stress and performance. In A. T. Welford (Ed.), Man under stress. New York: Wiley, 1974.

Wonderlic, E. F. Wonderlic personnel test. Northfield, Ill.: Wonderlic, 1975.

APPENDIX A

QUESTIONNAIRE

BIOGRAPHICAL INFORMATION

1. Estimate the months you have spent in the following positions:
   1. BN Primary Staff _____
   2. Co. CDR (or equivalent) _____
   3. Co. XO _____
   4. Platoon Leader _____

2. Total time on active duty: _____ years _____ months

3. Present duty position: BTRY/CO CDR _____ ISG _____

4. I was assigned to my present position (check one):
   1. _____ before the first sergeant was assigned to his job.
   2. _____ after the first sergeant was assigned to his job.

5. The total time I have worked with the first sergeant is
   _____ years _____ months

6. The total time I have worked in my present position is
   _____ years _____ months

7. Age: _____ Rank: _____

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RELATIONS WITH THE FIRST SERGEANT

Below are a series of statements which refer to conditions you may or may not be experiencing with the first sergeant. Please consider each statement individually and indicate how much the first sergeant behaves in that manner and how much stress you feel as a result of this behavior. (For example, when considering the statement, "He acts unfriendly," if the first sergeant is never unfriendly, you would indicate that he never is unfriendly and rate this behavior as causing you no stress. If the first sergeant is often unfriendly, but this type of behavior does not bother you, you would indicate that he frequently is unfriendly but might still rate the behavior as causing you no stress. If the first sergeant is unfriendly and his behavior creates some tension for you, you would indicate that he frequently is unfriendly and rate this behavior as causing you moderate stress.)

	How often does the first sergeant behave in the following manner?					How much stress or tension do you feel on your job as a result of the first sergeant's behaving in this manner?				
	Almost Never	Infrequently	Half the Time	Quite Frequently	Almost Always	Almost None	Slight	Moderate	Considerable	Extreme
1. He fails to cooperate with me in getting the job done.	1	2	3	4	5	1	2	3	4	5
2. He's not reliable or trustworthy.	1	2	3	4	5	1	2	3	4	5
3. He has trouble getting along with our subordinates.	1	2	3	4	5	1	2	3	4	5
4. He acts unfriendly or unapproachable.	1	2	3	4	5	1	2	3	4	5
5. He fails to do things the way I do.	1	2	3	4	5	1	2	3	4	5
6. He fails to keep me informed of what he's doing.	1	2	3	4	5	1	2	3	4	5
7. He becomes unpleasant when he's under pressure.	1	2	3	4	5	1	2	3	4	5
8. He's difficult to work with.	1	2	3	4	5	1	2	3	4	5
9. He fails to pay attention to my suggestions.	1	2	3	4	5	1	2	3	4	5
10. He fails to notify me of changes.	1	2	3	4	5	1	2	3	4	5

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	How often does the first sergeant behave in the following manner?					How much stress or tension do you feel on your job as a result of the first sergeant's behaving in this manner?				
	Almost Never	Infrequently	Half the Time	Quite Frequently	Almost Always	Almost None	Slight	Moderate	Considerable	Extreme
11. He fails to set definite standards of performance.	1	2	3	4	5	1	2	3	4	5
12. He's unwilling to make changes.	1	2	3	4	5	1	2	3	4	5
13. He fails to understand the task he's trying to get performed.	1	2	3	4	5	1	2	3	4	5
14. He takes up my time with unimportant matters.	1	2	3	4	5	1	2	3	4	5
15. He fails to remember things I tell him.	1	2	3	4	5	1	2	3	4	5
16. He creates conflicts for me with our subordinates.	1	2	3	4	5	1	2	3	4	5
17. He uses me for his own purposes.	1	2	3	4	5	1	2	3	4	5
18. He offers me little help performing my job.	1	2	3	4	5	1	2	3	4	5
19. He interferes with my dealings with our subordinates.	1	2	3	4	5	1	2	3	4	5
20. He shows a lack of confidence in my ability to do my job.	1	2	3	4	5	1	2	3	4	5
21. He fails to trust me.	1	2	3	4	5	1	2	3	4	5
22. He fails to value my opinions.	1	2	3	4	5	1	2	3	4	5
23. He seems nervous and worried about his own job performance.	1	2	3	4	5	1	2	3	4	5
24. He's only concerned about his own job performance.	1	2	3	4	5	1	2	3	4	5
25. He interferes with my doing my job to the best of my ability.	1	2	3	4	5	1	2	3	4	5

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How often are the following statements true for your job?

	Never			Sometimes			Always
a. I have to do things that should be done differently.	1	2	3	4	5	6	7
b. I am not clear as to what my responsibilities are.	1	2	3	4	5	6	7
c. I work under incompatible policies and guidelines.	1	2	3	4	5	6	7
d. It is not clear who has the authority to make decisions.	1	2	3	4	5	6	7
e. I receive conflicting job demands from different people.	1	2	3	4	5	6	7
f. I am not clear as to how things should proceed.	1	2	3	4	5	6	7

Rate your present job on how much overall stress it places on you.

No Stress 1 2 3 4 5 6 7 Extreme Stress

How satisfied are you with your present job?

Extremely Dissatisfied 1 2 3 4 5 6 7 Extremely Satisfied

How much effort do you expend on your job?

Minimum 1 2 3 4 5 6 7 Maximum

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APPENDIX B

PERFORMANCE RATINGS

INDIVIDUAL LEADER PERFORMANCE RATING

PLT _____ CO_____ BN_____ Position_____

In comparison to all individuals I know of in a similar position, I rate this individual as follows: (circle one)

	Greatly exceeds job requirements	Exceeds job requirements	Meets job requirements	Needs improvement on job requirements	Does not meet job requirements
1. The way he carries out administrative actions required of him as a leader of a unit in keeping with SOP's and REG's.	5	4	3	2	1
2. The way he knows and understands the personal problems of subordinates and considers their suggestions and feelings.	5	4	3	2	1
3. H's rapport with his subordinates without becoming overly familiar.	5	4	3	2	1
4. His technical proficiency with the available methods, techniques and equipment necessary to do the job.	5	4	3	2	1
5. The extent to which he takes the initiative to propose and carry out innovations relating to the job and to the supervision of his people.	5	4	3	2	1
6. The way he organizes his people and specifies ways of getting the job done.	5	4	3	2	1
7. The way he works with unit officers and NCO's and yourself to accomplish the mission.	5	4	3	2	1
8. The way he handles his job when demands are extra heavy or when he finds himself under severe pressure.	5	4	3	2	1

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PAIR PERFORMANCE RATING

PLT _____ CO _____ BN _____

In comparison to all pairs I know of in a similar position, I rate this pair as follows: (circle one)	Greatly exceeds job requirements	Exceeds job requirements	Meets job requirements	Needs improvement on job requirements	Does not meet job requirements
1. The way they carry out administrative actions required of them as leaders of a unit in keeping with SOP's and REG's.	5	4	3	2	1
2. The way they know and understand the personal problems of subordinates and consider their suggestions and feelings.	5	4	3	2	1
3. Their rapport with their subordinates without becoming overly familiar.	5	4	3	2	1
4. Their technical proficiency with the available methods, techniques and equipment necessary to do the job.	5	4	3	2	1
5. The extent to which they take the initiative to propose and carry out innovations relating to the job and to the supervision of their people.	5	4	3	2	1
6. The way they organize their people and specify ways of getting the job done.	5	4	3	2	1
7. The way they work with unit officers and NCO's and yourself to accomplish the mission.	5	4	3	2	1
8. The way they handle their job when demands are extra heavy or when they find themselves under severe pressure.	5	4	3	2	1

Indicate the average amount of on the job personal contact you have with the members of this pair: (circle one)

	Once a week or less	Twice a week	Once Daily	Two-four times daily	Five or more times daily
Superior member only	1	2	3	4	5
Subordinate member only	1	2	3	4	5
Both members together	1	2	3	4	5

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UNIT PERFORMANCE RATING

Rate the unit on the following dimensions in comparison to other units you have known by placing an X at the appropriate location on the scale.

1. Tactical Proficiency (Ability to carry out assigned tactical mission)

Unsatisfactory ... Superior

1 : 2 : 3 : 4 : 5 : 6 : 7

2. Maintenance of equipment and vehicles

Unsatisfactory ... Superior

1 : 2 : 3 : 4 : 5 : 6 : 7

3. Teamwork and Cooperation

Unsatisfactory ... Superior

1 : 2 : 3 : 4 : 5 : 6 : 7

4. Discipline and Standards of Conduct

Unsatisfactory ... Superior

1 : 2 : 3 : 4 : 5 : 6 : 7

5. Overall Effectiveness

Unsatisfactory ... Superior

1 : 2 : 3 : 4 : 5 : 6 : 7

Company _____

Platoon _____

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APPENDIX C

MORALE RATINGS

UNIT MORALE RATING SCALES

INSTRUCTIONS

On the following pages are six scales concerned with unit morale. At the top of each page is a short explanation of the component of morale to be rated on that scale. The lower part of the page contains the rating scale, numbered from 1 (very poor) to 9 (very good). Beside the odd numbers are examples of the type of unit or individual that would get that particular rating. For instance, on the first page, an example of a company with very good superior-subordinate relations is given beside the 9 rating.

For each scale, read the description at the top of the page, and then the statements beside the numbers. Remember that the statements are only examples and may refer to company size units, platoons, or individuals.

Using the examples as a guide, pick the rating that comes closest to describing or being typical of the platoon which you are evaluating and check the appropriate number.

EXAMPLE:

If you think the 1st platoon has fairly poor superior-subordinate relations, and the statement beside number 3 on that scale is behavior you might expect from the 1st platoon, put a check by the "3".

If two of the statements are equally typical of the platoon's behavior, for example the statements by numbers 3 and 5, then check the number in between, in this case "4".

Check only one number on each page.

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SUPERIOR-SUBORDINATE RELATIONS

Trust and respect between subordinates and superiors in the unit, subordinates and superiors willing to spend informal time together (drinking beer, etc.); talking over personal concerns together; superiors pitching in and helping with the work when called for, working together without regard to rank; versus superiors harassing and nit-picking subordinates; superiors not helping solve subordinates' problems; superiors and subordinates not associating with or talking with each other.

Which of these statements would you expect to be typical of this individual/unit?

Rating

____9 Because of the respect and almost personal relationship that the men had with the company commander, each man put forth a little more effort than he normally would have for an inspection. When the company passed with flying colors, the commander threw a bash to show his appreciation to the men.

____8

____7 When a group of servicemen, mostly NCOs, were sitting at the bar and a company grade officer approached, they invited him for a drink. Since it was after hours, the officer accepted and the men discussed some of the problems that faced the company.

____6

____5 At the Forward Observer OP during field maneuvers, two enlisted men got to play cards and drink with two captains.

____4

____3 These NCOs rented places in a nearby town so they would not have to stay in the barracks with the EM.

____2

____1 The men had a general feeling that the commanding officer was harassing them. The men sabotaged their own equipment and the mission failed.

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TEAMWORK AND COOPERATION

Helping other people in the unit with their personal or job related problems; working and playing well together as a unit; sacrificing for other unit members or the unit as a whole; staying together as a unit even through difficult times; versus showing indifference toward the personal or job related problems of other unit members; failing to work smoothly together on the unit task; displaying selfish interest in one's own welfare and a lack of concern for the well-being of other individuals or the unit; avoiding other unit members during off-duty hours and recreational activities.

Which of these statements would you expect to be typical of this individual/unit?

Rating

____9 The men in this unit volunteered to dig a water line by hand. All the men participated to spread the work and prevent heat exhaustion, while the mess hall provided refreshments. The men in the unit felt good that they could work together to get this job done.

____8

____7 The commander decided that the company would play volleyball for physical training. All of the men got involved in the games and unit competition was set up.

____6

____5 Many of the men in this unit played volleyball and basketball in the post's sports center during off-duty hours.

____4

____3 When an EM fell out during a PT run, the rest of his unit left him behind.

____2

____1 When one soldier suffered from an overdose of drugs, the three others with him ran off to get rid of the stuff, leaving him alone.

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PERFORMANCE AND EFFORT

Spending extra time and effort to get the job done; volunteering or taking the initiative to do the job well; performing well; versus expending little or no effort toward getting the job done; avoiding or passively resisting doing work; performing poorly.

Which of these statements would you expect to be typical of this individual/unit?

Rating

_____9 When maintenance mechanics found an error in their assembly procedures on an aircraft, they told their platoon leaders of their mistake and requested that the hangar be opened Saturday and Sunday if necessary to meet their previously promised Monday delivery.

_____8

_____7 This section was asked to prepare a set of firing charts by a specific time. The charts were finished ahead of time.

_____6

_____5 The men in this unit did not push for top performance, although they did their jobs and kept busy.

_____4

_____3 The service section of a support unit had a large backlog of equipment needing repair. All EM assigned to this section appeared to be busy but their output was very low compared to other service sections.

_____2

_____1 During a period these EM slowed their work down and made mistakes that cost time and new parts. They were working seven-day weeks, but at the end of the period they were accomplishing only the same amount of work in seven days that they had been accomplishing in five before.

REACTIONS TO ADVERSITY

Tolerating adversity or perceived injustice without complaint; accepting hardships readily; expressing satisfaction with one's own or with the unit's situation, sticking it out in the face of adversity; versus complaining, griping; bitching; giving up; succumbing to adversity; withdrawing from hardship situations; expressing dissatisfaction, resentment, or bitterness about one's own or about the unit's situation.

Which of these statements would you expect to be typical of this individual/unit?

Rating

_____9 When time in service was extended for promotions for the lower enlisted ranks, this individual ignored the change and performed his job without complaint.

_____8

_____7 This on-duty crew finally got cold chow at 2100 hours. The crew complained, but still continued to perform their duties.

_____6

_____5 When DA cut the tour in Korea from 13 to 12 months, the leave policy was also to be changed from 30 to 18 days. The men in this unit wrote their congressmen to try to stop the change in leave policy.

_____4

_____3 This person became quiet and subdued after receiving a "Dear John" letter from his wife. He withdrew from social contacts, drank a lot, and took unnecessary chances in combat.

_____2

_____1 At a small, closed-in military site that had no recreational facilities, the EM's tore up some jeeps, burned barrack facilities, and destroyed other military property.

BEARING, APPEARANCE AND MILITARY DISCIPLINE

Crisp military appearance; responding quickly to orders; doing the "right" thing in the absence of explicit orders; low frequency of AWOLs; showing an eagerness to correct nonstandard conditions; being alert, versus sloppy appearance; high frequency of AWOLs; destruction of property; fighting; refusing to obey orders; responding slowly to military orders.

Which of these statements would you expect to be typical of this individual/ unit?

Rating

_____9 Even though the day was to be spent on the rifle range lying in the dirt, this individual got up at 5:00 a.m. to polish his boots, check over his uniform, and make sure he was clean shaven.

_____8

_____7 When this unit holds formations to disseminate information, all the men fall out on time, in correct uniform.

_____6

_____5 When an officer saw a man with his field jacket unbuttoned, he told him to button it properly or not to wear it.

_____4

_____3 Members of the unit walked with hands in pockets, hats on the backs of their heads, and a slouchy posture.

_____2

_____1 This unit had two AWOLS per month per 200 members, filthy areas in new billets, troops staggered to and from work at their own leisure, and there was a high incidence of drug use.

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PRIDE IN UNIT, ARMY, AND COUNTRY

Expressing pride and enthusiasm for one's country and the Army; showing pride in one's unit by taking actions to make the unit distinctive and clearly identifiable; bragging about the accomplishments of the unit; challenging and competing with other units; versus downgrading or expressing indifference for one's country and the Army; showing a lack of concern for one's unit and its accomplishments; resisting wearing the uniform or identifying unit insignia.

Which of these statements would you expect to be typical of this individual/ unit?

Rating

_____9 The unit passed all major inspections with highest scores in the unit headquarters; its AWOL, VD, and accident rates were the lowest; and it had the highest operational time. Members of the unit told other units that they would have to "go some" to match their accomplishments.

_____8

_____7 Many members of the unit wanted the unit to be recognized, so they purchased t-shirts which they wore during PT.

_____6

_____5 When asked about their unit, these soldiers mentioned which one it was, but didn't say much about it one way or the other.

_____4

_____3 During A.I.T. the top student in the class refused the "student of the week" armband from the first sergeant based on his personal feeling about the Army.

_____2

_____1 These EM let everyone outside their unit know that they thought their unit was the worst in the Army.