

RESEARCH NOTE 83-44

PRELIMINARY DEVELOPMENT OF THE COMMANDER'S UNIT ANALYSIS PROFILE:  
A LEADERSHIP TOOL FOR THE SMALL MILITARY UNIT

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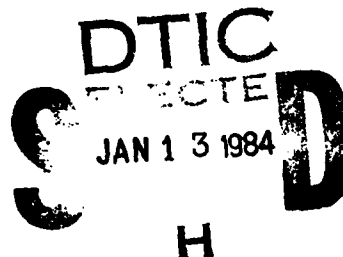
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was designed to assess soldier opinions on a variety of situational and personnel factors. This initial version of the questionnaire was administered to 674 soldiers at Fort Hood. This report describes the results of a series of analytical studies of the data obtained. Twenty-two factors were interpreted and named. Further analyses indicated that 22 factors could be assessed by 49 items with little loss of information. Recommendations for further development of the questionnaire were made.

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TOOL FOR THE SMALL MILITARY UNIT

FOREWORD

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The Fort Hood Field Unit of the US Army Research Institute for the Behavioral and Social Sciences (ARI) conducts research in a variety of areas related to the needs of the Army in the field. This report addresses one such area, the measurement of unit effectiveness. It deals specifically with a questionnaire designed to assess soldier opinions on a host of situational and personnel factors.

This report presents the results of one of the analyses of responses to the questionnaire. A factor analysis was employed and a total of 22 interpretable factors were obtained. Further analyses showed that these 22 factors could be assessed employing approximately half the original items.

ARI research in this area was conducted both as an in-house effort, and as a joint effort with personnel of the Human Resources Research Organization (HumRRO), under Contract No. MDA903-79-C-0191. This research is responsive to the objectives of RDTE Project 2Q263739A, "Human Performance in Field Assessment," FY 1980 Work Program.

## DEVELOPMENT OF THE COMMANDER'S UNIT ANALYSIS PROFILE: A LEADERSHIP TOOL FOR THE SMALL MILITARY UNIT

### BRIEF

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#### Requirement:

The overall effectiveness of the small Army unit (company/battery/troop) can be affected by a host of situational and personnel factors. Commanders have some degree of control over many of these factors, but they may not know which factors are influencing the performance of their units--either positively or negatively--at any given time. As a result, they may not know what kinds of corrective actions to take and what kinds of changes to avoid.

At present, voluntary feedback from unit troops is the usual mechanism by which the small-unit commander obtains information about how his troops feel about many relevant factors. However, while voluntary feedback is undoubtedly useful, it is typically negatively biased and usually represents the opinions of only a vocal minority. Thus, commanders need a means of obtaining representative information that will permit them to compare their units to other similar units on situational and personnel factors. A brief, and anonymous, questionnaire appears to be the best means for providing commanders this information. This report describes the initial research directed toward the development of the Commander's Unit Analysis Profile, an instrument designed to meet the need described.

#### Procedure:

A 99-item questionnaire designed to assess soldier opinions on a host of situational and personnel factors was constructed and administered to 674 soldiers in 21 companies at Fort Hood, Texas. The data were factor analyzed in an effort to determine what factors were actually being assessed by the items, and to determine which items were the best measures of each factor.

#### Findings:

The original analysis yielded 23 factors. Twenty-two factors were interpreted and named, although the interpretations of several minor factors were made with certain reservations. The sample was divided in half, and half was analyzed in the same manner. Twenty of the original 22 factors emerged, partially confirming the existence of the major factors in the entire sample.

The next step was to select items which appeared to be the best measures of each of the 22 factors. A total of 49 items were selected. These items were again factor analyzed, and 21 of the original 22 factors emerged. This demonstrated that the length of the questionnaire can be considerably reduced with a minimal loss of information.

These analyses made it possible to suggest directions for the development of a revised questionnaire.

#### Utilization of Findings:

Several additional steps must be taken before a "final" questionnaire can be fielded. Work is currently underway examining the relationship of each item to external criteria of unit effectiveness such as reenlistment rates and battalion and brigade commanders' ratings. A revision of the questionnaire is also being prepared, based in part on the results of this factor analytic study. The process of data collection, analysis, and revision will be repeated until an instrument with the desired characteristics is produced. The Commander's Unit Analysis Profile will provide the commanders of company-size units with an easily obtainable and interpretable profile to compare their own units to similar units on a variety of situational and personnel factors that influence unit effectiveness.

# DEVELOPMENT OF THE COMMANDER'S UNIT ANALYSIS PROFILE: A LEADERSHIP TOOL FOR THE SMALL MILITARY UNIT

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## Chapter I

### INTRODUCTION AND OVERVIEW

#### Background and Military Problem

Army doctrine specifies that the primary goal of military leadership is the accomplishment of the mission. Military leaders are given the responsibility for making decisions that will result in the successful attainment of this goal. In order to make the most appropriate decisions, the leaders must identify factors that can affect the outcome of the mission and take them into account in the decision-making process.<sup>1</sup>

Two primary resources commanders have at their disposal to carry out the unit missions are their troops and their equipment. The performance of both of these resources depends on a complex of historical, situational, and personnel factors which commanders must be familiar with in order to optimize the overall effectiveness of their units.

Many factors are thought to affect unit performance by influencing unit morale, the importance of which military commanders have almost always recognized. They know that excellent training and quality equipment may not result in top performance if morale is low, though these factors certainly have some impact on morale. They also recognize that morale is one of the most difficult aspects of readiness to define or assess because the job tends to isolate commanding officers from their troops. Subordinates, wanting to appear as competent as possible, tend to screen out unfavorable information before it reaches the commander. Commanders may query their troops directly, only to find that they are reluctant to "open up" to a person in authority. Yet, to be able to avoid unnecessary changes and take well-directed corrective actions, it is imperative that commanders know the situational and personnel factors that are affecting their units, either positively or negatively.

FORSCOM has responded to this need on the part of the small-unit commander by requesting the development of an easy-to-use unit survey procedure to provide commanders timely and accurate information about their troops' attitudes on a wide variety of mission-related factors. This report discusses the first phase of this research. It describes the development of a draft questionnaire, the Commander's Unit Analysis Profile, and recommends selected questionnaire items for further study. Future reports will describe item refinement, final questionnaire design, procedures for administration, and methods for reporting the results to the individual commander.

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<sup>1</sup>Headquarters, US Department of the Army. Military leadership (Field Manual 22-100). Washington, DC: US Government.

## Problems in Assessing Troop Attitudes

That a wide variety of situational and personnel factors can have an impact on unit performance is well known to commanders. However, valid information on these factors is not easily obtainable by means readily available to commanders. Typical command indicators, such as AWOL and reenlistment rates, are indications of morale, but they do not tell the commander what the specific problems, if any, are. This type of information is more readily obtained through self-report measures in which the soldiers in a unit can express their reactions about the Army as a whole or about their unit in particular.

One type of self-report that is available to military commanders is voluntary feedback, but various defects in voluntary self-reporting make it a rather poor source of data. Soldiers who are particularly pleased about certain situations may report their reactions to the commander directly or indirectly. It is more likely, however, that they will report situations or events that displease them. Many reactions may never get reported because of a normal hesitancy by troops to communicate their reactions to their superiors. Another defect in voluntary self-reporting is that troops may have difficulty explaining what is wrong, or they may describe one problem when, in actuality, several things may be troubling them. Finally, the reactions that do get communicated may represent not the majority of the troops, but a vocal minority.

Another way for commanders to obtain self-reports is to interview their troops. This approach avoids the problem of self-selection found with voluntary feedback, however, it still has all the other problems associated with voluntary feedback. Interviews have the additional major problem of taking up far too much of the unit commander's time.

A third type of self-report available to military commanders is the formal questionnaire. Questionnaires concerned with a variety of issues have been used extensively by all of the military services in attempts to assess personal perceptions. This type of self-report has definite advantages which make it more desirable in many ways than voluntary feedback or interviews. Questionnaires can be administered to large samples of soldiers, which ensures that the collected information is representative of the entire unit rather than just those who are willing to express themselves spontaneously. Questionnaires can be administered in such a way that the reactions of any particular person can remain anonymous. Anonymity not only guarantees the soldier's privacy, it assures that there is less pressure to respond favorably. Also, questionnaires can be group administered so that a minimal amount of time is consumed.

On the other hand, certain problems have occurred in the past as a result of questionnaire usage. A major problem was the frequent excessive delay between the administration of the questionnaire and the availability of the results to the unit commander. In fact, many small-unit commanders did not receive feedback at all. This was because the questionnaire was usually designed to serve primarily a research purpose or to service someone (or some faction) other than the small-unit commander. Personnel turbulence and other changes within the small military unit make delayed feedback of limited value.

Another problem was that feedback was often summarized in statistical terms which could be understood only by persons with specialized training. Furthermore, commanders were sometimes given data that summarized the responses of many units, with no specific

information available about their own units. Sometimes when feedback did concern their own units, no norms based upon other units were provided. In such cases, commanders cannot ascertain whether the reactions obtained from the soldiers in their units deviate from those given in other units. Finally, some questionnaires have been so lengthy that the required administration time seriously interfered with training and the other duties that had to be performed within the unit.

## Objectives

It was realized that the questionnaire to be developed had to avoid the kinds of problems discussed in the previous section. Therefore, it was planned that it should meet the following criteria:

1. It should be easy to administer and interpret so that no specially trained personnel will be required.
2. It should have a short administration time so that interference with training schedules will be minimal.
3. The questions should be phrased simply enough so that they can be understood by soldiers with minimal reading skills.
4. The scoring should be rapid so that the results can be given to a unit commander within 10 working days.
5. The results should enable the unit commander to compare his unit with norms based upon other similar units.
6. The administration and processing should be confidential so that the respondents cannot be identified, and so that unit commanders will know that their Efficiency Reports will be not affected.
7. It should serve as a tool for company commanders, enabling them to identify factors that are contributing to and detracting from the effectiveness of their units.

What is perceived as the eventual product is a relatively short questionnaire, the data from which can be used by commanders to compare their units with other similar units on a profile of situational and personnel factors that influence unit effectiveness. Hence, the title Commander's Unit Analysis Profile was proposed.

There were two major objectives for the initial phase of the research:

1. To construct a pool of items for a preliminary questionnaire that would measure a large number of situational and personnel factors considered relevant to unit operational effectiveness.
2. To determine from an initial administration of the questionnaire (a) what items were misunderstood by the troops, (b) what items were capable of statistically differentiating among companies, (c) what factors were being assessed by the items, and (d) which items were the best measures of each of the factors. This report deals only with

objectives 2(c) and 2(d). Other analyses are being conducted to examine the other objectives and will be reported separately.

### **Approach**

**Initial item pool.** The first step was to obtain a pool of items to assess situational and personnel factors considered related to unit effectiveness. Many of the items were paraphrased items from various other questionnaires, including the Quality-of-Life questionnaire used for several years at Fort Hood.<sup>2</sup> Other items were written specifically for the present questionnaire. Altogether, 99 items were obtained. They were written in a multiple-choice format to minimize the time required for administration and scoring. In addition, they were phrased in simple language so that they were apt to be understood by soldiers with minimal reading skills. In some cases, idiomatic phrasing was used to improve understanding. Each item consisted of a question followed by five response choices presented, where applicable, in order of decreasing favorableness.

**Selection of items for a revised questionnaire.** Analyses of the data obtained with the preliminary questionnaire items will be used to develop a revised questionnaire. The particular analyses described in this report represent an attempt to select items for further study by determining the factor structure of the original item pool through a series of factor analyses.<sup>3</sup> This type of analysis can be very useful in reducing the number of items required to cover the domain assessed by the total set of items. By selecting only items which are relatively "pure" measures of each factor, it is possible to approximate factor scores for each individual from a considerably reduced pool of items. Finally, knowledge of the factorial structure of the questionnaire can be useful in developing an efficient feedback system for commanders. A commander can be given his unit's score on each factor rather than each item, thereby reducing the number of scores required to summarize the results.

A revised questionnaire will be based on the results of all analyses. New items may be added, but it is expected that a large number will be deleted. The revised questionnaire will also be analyzed, and modified in keeping with the objectives outlined in the previous section.

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<sup>2</sup>J. Jones & E. R. Smootz. Survey of soldier quality of life at Fort Hood (in press). Alexandria, Virginia: US Army Research Institute for the Behavioral and Social Sciences.

<sup>3</sup>For the reader who is not familiar with factor analysis, the following simplified explanation is offered. Essentially, factor analysis is a statistical technique for grouping a large number of variables (in this case, questionnaire items) into a smaller number of clusters. The variables in each cluster all measure something in common, referred to as a "common factor." Each cluster defines a different common factor. Each factor is named according to the perceived common content of the variables within the cluster. For example, the items in one of the largest clusters in one of the present analyses all appear to be related to the perceived quality of officer leadership (see Table 2-1a). The factor was therefore named "Quality of Officer Leadership." In other words, factor analysis is a tool that aids the analyst in obtaining a clearer picture of the smaller number of common contents, or common factors, being assessed by a large number of variables.

## **Chapter 2**

### **METHODS, PROCEDURES AND RESULTS**

#### **Questionnaire**

In addition to the 99 items designed to assess situational and personnel factors, the questionnaire booklet consisted of a cover page, a message to the soldier, and 17 items designed to obtain background information on each soldier. The questionnaire when administered was titled "Soldier Opinion Questionnaire." A complete copy of the booklet is shown as Appendix A.

#### **Respondents**

The respondents were 674 enlisted men in grades E5 and below. They were assigned to 21 tank companies at Fort Hood, Texas. At the time of the questionnaire administration, they had been in the Army for a mean of 29.1 months, and had been assigned to the present company for a mean of 13.1 months. Eighty-two percent reported that they were working in their primary MOS (Military Occupational Specialty). Their mean age was 22.1 years.

#### **Questionnaire Administration**

The questionnaires were administered in June and July 1979 by Army officers representing the US Army Research Institute for the Behavioral and Social Sciences (ARI). Each administration took place in a unit classroom. The instruments were generally administered to an entire battalion, although in some cases they were administered to just one or two companies within a battalion.

The officers who administered the survey instrument informed the respondents that the questionnaire was being given to enable soldiers to express their opinions about their company and about Army life. Although the respondents were instructed not to identify themselves, they were told that composite data from the company would be sent to their company commander. Finally, they were assured that no individual's responses would be given to any superiors.

Respondents were given as much time as they needed to answer the questions. Most finished in less than 30 minutes, and almost none required more than 45 minutes. When a soldier finished answering the questions, he was asked to sit quietly until everyone else had finished. When everyone was done, the soldiers were given the opportunity to ask questions about the survey instrument and the purposes for which it would be used.

## Factor Analysis Procedures

Factor analysis of the 99 items was accomplished employing UCLA's biomedical computer program BMDP4.<sup>1</sup> Twenty-three factors having eigenvalues greater than 1.00 were extracted. This simple criterion for cessation of factoring was originally proposed by Kaiser, who has found that it agrees quite well with other more complex criteria.<sup>2</sup> Furthermore, Kaiser states that the criterion should be lenient in "exploratory" factor analyses, a designation appropriate to this investigation.

Rotation to "simple structure" was accomplished by employing both the quartimax and varimax rotational schemes. These rotational schemes produce slightly different solutions because the quartimax method essentially maximizes the variance of the loadings for each variable while the varimax method essentially maximizes the variance of the loadings for each factor.<sup>3</sup> Nevertheless, it was assumed that the "true" factors would be produced by both methods. It was further assumed that the true measures of each factor would have high loadings on that factor and low loadings on all other factors in both solutions. Hence, both rotational schemes were employed in an effort to find these true measures for each factor. A copy of the intercorrelation matrix is shown in Appendix B. The sorted rotated factor loadings from the varimax rotation are shown in Appendix C, and the results of the quartimax rotation are presented in Appendix D. In both Appendixes C and D loadings less than or equal to  $\pm 0.25$  are not shown to simplify the presentations.

## Factor Matching and Interpretation

An attempt to match the factors from the two rotations was made by examining the high loadings for each factor. The results of this attempt and the interpretation of the factors are presented in Tables 2-1a through 2-1v. A "high" loading for interpretation purposes was defined as one which accounts for 20 percent or more of the variance of the item, which means a factor loading of  $\geq .447$ .

In the tables below, the defining items for both the varimax and quartimax solutions are presented. In the varimax rotation no more than seven items had loadings which met the criterion for high loadings on any factor. This was not true of Factor I in the quartimax rotation. However, to keep the table simple, only the highest seven loadings for the quartimax rotation are shown as adding the remaining variables would not affect the interpretation.

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<sup>1</sup>W. J. Dixon & M. B. Brown. BMDP-79: Biomedical computer programs (P-series). Berkeley: University of California Press, 1979.

<sup>2</sup>H. F. Kaiser. A second generation "Little Jiffy." Psychometrika, 1970, 35, 401-415.

<sup>3</sup>H. A. Harman. Modern factor analysis (3rd ed., rev.). The University of Chicago Press, 1976.

These tables also present rotated factor loadings for a 49-item factor analysis. These items were selected following the factor matching and interpretation based on the two rotated solutions of the 99-item analysis. These items are the ones selected by the authors as being the best measures of each factor. The general guideline followed was to select items which had high loadings on only a single factor in both the varimax and quartimax rotations. Items with the highest loadings on each factor were not necessarily selected. For example, item 33 had larger loadings on Factor IV than items 30, 34, and 43 in both analyses. However, item 33 had a loading of .471 on Factor I in the quartimax rotation, while the other items defining the factor had no loadings exceeding  $\pm .25$  on other factors. Therefore, items 30, 34, and 43 were selected as being better measures of the factor. Since the selections were made subjectively, the reader may wish to consult Appendixes C and D to evaluate the authors' selections.

The sorted rotated factor loadings for the 49-item analysis are shown in Appendix E. It can be seen that all but one of the original 22 interpreted factors did emerge exactly as expected. The original Factor XVIII split into two factors (Factors XIX and XXIII, see Appendix E).

Essentially, this latter exercise demonstrated factorial invariance. Selected items representing 22 factors were analyzed, and except for a split in a minor factor, the same 22 factors emerged. However, the point was to demonstrate that the original factors could be assessed by a smaller number of better measures of each of the factors. Examination of the rotated loadings in Appendix E will show that very few items had loadings exceeding  $\pm .25$  on any except that factor they helped define. These items are the ones recommended for further study.

In general, the solution for the 49-item analysis more nearly approaches the concept of simple structure than either of the original solutions involving all 99 items. That is, the loadings of each item on the factor it helps define tend to be higher in the 49 variable solution, while loadings on other factors tend to be lower.

The numbering of the factors in Tables 2-Ia through 2-Iv represents the order in which they emerged from the varimax rotation of the 99-item analysis. This is not necessarily the same order in which they emerged in either the quartimax rotation of the 99-item analysis or the varimax rotation of the 49-item analysis. To facilitate comparisons, each table presents the item stem along with the rotated loadings and rank order of the loadings for each solution. In many instances, the rank ordering is virtually meaningless as the loadings may differ only in the third digit.

TABLE 2-1a

## Factor I: Quality of Officer Leadership

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis<sup>3</sup></u>	
	<u>Varimax Rotation<sup>2</sup></u>	<u>Quartimax Rotation<sup>2</sup></u>	<u>Varimax Rotation<sup>2</sup></u>	
76. <sup>1</sup> How well do the commissioned officers in your company do their jobs?	.681 1	.755 3	.778 1	
80. As leaders, how are your company's commissioned officers?	.679 2	.736 4	.774 2	
51. Do the commissioned officers in your company treat you with respect?	.665 3	.672 5	.740 4	
74. How much do the commissioned officers in your company care about the needs of their people?	.649 4	.758 2	.744 3	
71. If you go to your company commander with a personal problem, how well do you think he will treat you?	.592 5			
70. How easy do you think it is to see your company commander to discuss personal problems?	.539 6			
84. Overall, how well do you think your company is run?	.453 7	.788 1		
83. How is the morale of <u>other soldiers</u> in your company?		.660 6		
85. Overall, how do you think your company compares to other companies?		.651 7		

<sup>1</sup>Item number on questionnaire.<sup>2</sup>The factor loadings and rank orders for each rotation are tabulated.<sup>3</sup>This solution is based on 49 items selected by the authors as being the best or "true" measures of the original factors.



The items defining Factor I in both solutions are largely associated with commissioned officer leadership. However, the factor appears to include two aspects of leadership. Items 76, 80, and 84 appear to pertain to command functions while items 74 and 51 appear to pertain to the person or interpersonal relationship functions of leadership. Since officer leadership seems to be the primary theme of the items defining the factor, the factor was named Quality of Officer Leadership.

TABLE 2-1b

Factor II: Reenlistment Potential

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>		<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>
97. How do you feel at this time about reenlisting for another term?	.851	1	.800	1
98. How do you feel at this time about making the Army a career?	.826	2	.765	2.5
99. If you could have an honorable discharge at this time, would you prefer to stay in or get out?	.744	3	.686	2.5
96. Would you encourage civilian friends to enlist in the Army?	.687	4	.601	4
93. Overall, do you like Army life?	.679	5	.598	5
95. How much will your decision to reenlist or not depend on your being able to get a good job in civilian life?	.529	6		
92. How do you feel about being in the Army?	.484	7		

Factor II is defined by items that pertain to a soldier's intentions to make the Army a career by reenlisting. It is interesting to note that these items pertain to present or future intentions rather than intentions upon entering military service. Thus, the items reflect reactions to military life rather than expectations. Since the items all deal with future intentions, the factor was named Reenlistment Potential.

TABLE 2-1c

## Factor III: Immediate Supervisory Leadership

<u>Item</u>	<u>99-Item Analysis</u>				<u>49-Item Analysis</u>			
	<u>Varimax Rotation</u>		<u>Quartimax Rotation</u>		<u>Varimax Rotation</u>			
10. Is your immediate supervisor willing to listen to your work problems?	.735	1	.654	1	.772	1		
9. How much does your immediate supervisor like to hear your ideas about how your job should be done?	.709	2	.612	2	.752	2		
7. How clear are your immediate supervisor's explanations of how to do your job?	.617	3	.506	4				
8. How clear are the job objectives your immediate supervisor sets for you?	.608	4	.507	5				
12. How friendly is your immediate supervisor?	.606	5	.527	3				
11. How much does your immediate supervisor care about how well people do their jobs?	.543	6						
19. How much freedom do you have to do your job the way you think it should be done?	.526	7						

Factor III is defined by items that reflect the relationship between the respondent and his immediate supervisor. All but one of the items (item 12) produced by both rotations pertain directly to relationships on the job, with supervisor/subordinate communications being the underlying theme of most of the items. This factor seemed best described by the title Immediate Supervisory Leadership.

TABLE 2-1d

## Factor IV: Quality of Troops

<u>Item</u>	<u>99-Item Analysis</u>				<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>		<u>Quartimax Rotation</u>		<u>Varimax Rotation</u>	
33. How many of the soldiers in your company do you think are good soldiers?	.660	1	.565	1		
28. How well do the people in your company work together?	.628	2	.527	4		
43. How many of the soldiers in your company really want to do well in training?	.610	3	.516	5	.599	3
30. On the average, how well do the people you work with do their jobs?	.607	4	.536	3	.628	2
34. What percentage of the soldiers in your company perform so poorly that the unit might be better off without them?	.605	5	.559	2	.772	1
29. How much do the soldiers in your company make each other feel like doing a good job?	.593	6	.470	6		

The items defining Factor IV are all related to the respondent's perceptions of his peers relative to both job performance and motivation to perform. In other words, the items reflect the respondents judgment of the overall quality of the personnel in his unit. An appropriate name for this factor seemed to be Quality of Troops.

TABLE 2-1e

## Factor V: Job Satisfaction

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>		<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>
26. How well does your job make use of your abilities?	.744	1	.701	1
25. How do you like your job?	.739	2	.697	2
24. How interesting is your job?	.714	3	.670	3
27. How useful do you think the skills you use in your job will be to you later on?	.670	4	.637	4

Factor V appears to reflect the degree to which the respondent is satisfied with his job in the company. While two of these items pertain to personal reactions to the job itself (items 24 and 25), the other two pertain to the skill aspects of the job (items 26 and 27). Nevertheless, the most appropriate title for the factor seemed to be Job Satisfaction.

TABLE 2-1f

## Factor VI: Quality of Training

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>		<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>
36. Do you get enough MOS training in your company?	.724	1.5	.677	1
35. How much attention is given to MOS training in your company?	.724	1.5	.650	2
44. How is the physical training program in your company?	.483	3		
39. How good is the combat training in your company?	.476	4		
37. How hard is the combat training in your company?	.470	5		

Factor VI is defined by items that refer to company training. The two items with the highest loadings in both the varimax and quartimax solutions are concerned with the degree of concern connected with MOS training. The other items which met the criterion in the varimax solution are concerned with other aspects of training, with items 44 and 37 seemingly oriented toward the difficulty of training. Although items 44, 39, and 37 are not shown in Table 2-1f for the quartimax solution, they did load 0.343, 0.318 and 0.364, respectively, on the factor. This would suggest that the soldiers viewed both concern with and difficulty of training as relevant aspects of the company's training strategy. Because of the various aspects of training covered by the defining items, this factor was titled Quality of Training.

TABLE 2-1g  
Factor VII: Food Service

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>	<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>	
62. Do you get enough to eat in your mess hall?	.763 1	.731 1	.741 3	
65. Do you get enough to eat when you are in the field?	.747 2	.727 2	.853 1	
64. How good is the food you get in the field?	.717 3	.698 3	.774 2	
61. How good is the food in your mess hall?	.672 4	.638 4		
63. How clean is your mess hall?	.599 5	.555 5		

The items defining Factor VII are related to different aspects of the Army mess service. Both quantity and quality (including sanitation) are reflected by the items with high loadings. This factor was titled Food Service.

TABLE 2-1h

## Factor VIII: Quality of NCO Leadership

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>	<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>	
77. How well do the NCOs in your company do their jobs?	.693 1	.550 1	.787 1	
81. As leaders, how are your company's NCOs?	.678 2	.501 2	.750 2	
75. How much do the NCOs in your company care about the needs of their people?	.627 3			
52. Do the NCOs in your company treat you with respect?	.474 4			

The items defining Factor VIII are all concerned with the company's noncommissioned officers. The two items common to both rotations pertain to job aspects of the NCO leadership. The two additional items which loaded on the factor in the varimax rotation pertain to interpersonal aspects of leadership. This was also observed in Factor I, Quality of Officer Leadership. Apparently, the soldiers tended to see both of these aspects of leadership as part of general leadership ability. However, it should be noted that the items with the highest loadings, and which appear in both rotations, pertain to the traditional command functions rather than the interpersonal functions. This factor was titled Quality of NCO Leadership.

TABLE 2-1i

## Factor IX: Quality of Off-Duty Activities

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>	<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>	
59. Are there enough social activities in your company?	.736 1	.674 1	.821 2	
60. Are you satisfied with the kind of social activities in your company?	.726 2	.647 2	.826 1	
58. How much are sports activities encouraged in your company?	.628 3	.554 3	.605 3	

Factor IX is defined by items dealing with company-sponsored off-duty activities. Because of this consistent theme, the factor was titled Quality of Off-Duty Activities.

TABLE 2-1j

Factor X: Job Facilitation

<u>Item</u>	<u>99-Item Analysis</u>				<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>		<u>Quartimax Rotation</u>		<u>Varimax Rotation</u>	
22.	How easy is it to get the right equipment to do your job?	.655	1	.599	1	.737 2
23.	In what condition is the equipment you usually work with?	.607	2	.551	2	.787 1
20.	Does "obeying the rules" ever make it harder to get your job done?	.592	3	.520	3	
78.	How many "mickey-mouse" rules does your company have?	.447	4			

The items loading on Factor X pertain to two different aspects of the military that can affect the ease with which work is accomplished. One aspect is the availability of necessary and adequately functioning equipment, the other is the rules that must be followed. Evidently, the soldiers saw both aspects as either facilitating or hindering job performance. This factor was titled Job Satisfaction to distinguish it from situational factors which might affect performance such as poor lighting, inadequate heating and cooling, etc.

TABLE 2-1k

## Factor XI: Standards of Military Courtesy and Discipline

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>		<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>
54. How high should the standards of discipline be in your company?	.774	1	.781	.820 2
56. How high should the standards of military courtesy be in your company?	.729	2	.735	.852 1
53. How high are the standards of discipline in your company?	-.630	3	-.631	3

All the items loading on Factor XI pertain to standards of military courtesy and discipline with the company. While it may appear that items 54 and 56 pertain to desired standards and the item 53 pertains to the observed level of discipline within the company, it should be noted that the response categories for items 54 and 56 require the respondent to compare the observed levels of discipline and military courtesy with an internal standard. Since the middle response category implies that observed levels are consistent with the standards, all other response categories are expressions of dissatisfaction. Thus, these items do not reflect a desired standard, but judgments of the existing levels of military courtesy and discipline as judged against this standard. In addition, the negative loading for item 53 occurs because judgments that the standards of discipline are low (response categories "d" and "e") are consistent with judgments on items 54 and 56 that the standards should be higher (response categories "a" and "b"). This factor seemed appropriately named Standards of Military Courtesy and Discipline.

TABLE 2-11

## Factor XII: Quality of Combat Training

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>		<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>
40. Do you think your company should get more or less combat training?	.796	1	.799	.849 2
38. Should the combat training in your present company be harder or easier?	.762	2	.744	.873 1
37. How hard is the combat training you get in your company?	-.493	3	-.531	3



The items defining Factor XII pertain to the amount of difficulty of combat training. Item 39, which requires the respondent to judge the quality of combat training within the company, does not have a high loading on this factor. However, it is likely that this is due to an artifact created by the nature of the response categories for items 38 and 40. In both items 38 and 40, the middle response category expresses the greatest satisfaction with combat training. In item 39, however, the first two response categories express the greatest satisfaction with combat training. Thus, it is possible that the soldiers in the sample consider the amount and difficulty of combat training to be aspects of the quality of training, but that the nature of the response scales prevented these different items from appearing on the same factor. The response categories are also responsible for the negative loading on item 37. A respondent who thought combat training was too hard would choose response "A" (very hard) to item 37, and would likely also choose response "e" (much easier) to item 38. The appropriate name for this factor appeared to be Quality of Combat Training.

TABLE 2-Im

Factor XIII: Job Importance

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>		<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>
3. How important is your duty MOS job to your company?	.757	1	.749 2	.839 1
2. How important is your duty MOS job to the Army?	.756	2	.749 1	.813 2

The items which define Factor XIII clearly pertain to the respondent's perceptions of the importance of his job. The factor was named Job Importance.

TABLE 2-In

Factor XIV: Company Race Relations

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>		<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>
69. Is the treatment of minority racial groups in your company better or worse than in civilian life?	.693	1	.670 1	.854 1
68. How fairly are racial problems handled in your company?	.617	2	.567 2	.601 2
67. How are race relations in your company	.585	3	.531 3	

The items loading on Factor XIV are all concerned with race relations within the company setting. The factor was title Company Race Relations.

TABLE 2-1o

Factor XV: Desired Superior-to-Subordinate Communications

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>		<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>
16. How often do you think you platoon leader should talk to you when you are on the job?	.752	1	.748	.773
14. How often do you think your company commander should talk to you when you are on the job?	.656	2	.655	.622
18. How often do you think your platoon sergeant should talk to you when you are on the job?	.641	3	.628	.741

The three items defining Factor XV had virtually identical loadings in both solutions. The items are clearly concerned with the desired level of superior-to-subordinate communications while on the job. However, none of the items specifically asks about job-related communications, so it is not possible to determine exactly what kind of communications the soldiers had in mind in responding to these items. Therefore, the factor was named Desired Superior-to-Subordinate Communications to avoid the question of job-relatedness.

TABLE 2-1p

Factor XVI: Work Effort

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>		<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>
32. How hard do you work compared to most others in your company?	.718	1	.722	.829
31. How hard do you work in your job?	.612	2	.601	.762

The items that have high loadings on Factor XVI pertain to the amount of effort expended by the respondent in the performance of his job. The most appropriate title for the factor seemed to be Work Effort.

TABLE 2-1q

## Factor XVII: Level of Platoon Superior-to-Subordinate Communications

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>		<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>
15. How often does your platoon leader talk to you when you are on the job?	.758	1	.752	.837
17. How often does your platoon sergeant talk to you when you are on the job?	.743	2	.739	.785

The items defining Factor XVII pertain to the actual level of communications from superiors within the platoon. This factor is interesting for two reasons. First, it shows that the respondent's perceptions of actual and should (see Factor XV: Desired Superior-to-Subordinate Communications) are unrelated. In other words, it appears that there is no congruence between the frequency of communications desired and that received. Second, it is interesting that item 13 (How often does your company commander talk to you when you are on the job?) had only small loadings on this factor (.317 varimax and .305 quartimax), while the should version of the question (item 14) loaded heavily on Factor XV. No explanation for this is apparent. The best descriptive title for this factor appeared to be Level of Platoon Superior-to-Subordinate Communications.

TABLE 2-1r

## Factor XVIII: Remuneration

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>		<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>
94. How do you feel your Army pay compares to the pay you could get in civilian life?	.584	1	.564	.915
66. How are your barracks?	.449	2	(.440)	(.043)

Factor XVIII was difficult to interpret, as there is no readily apparent reason why opinions on Army pay and Army barracks should define the same factor. Although item 66 fell below the criterion of .447 in the quartimax solution, it barely missed ( $f = .440$ ). The only other item which loaded at least .30 in both original rotational solutions was item 88 (Do you think the Army is concerned about you as an individual?). The factor was interpreted as reflecting opinions on how well the Army provides for its personnel, with pay being considered the most important single item. Therefore, this factor was

tentatively titled Remuneration. However item 66 did not load on this factor in the 49-item analysis. The loading (.043) is shown in Table 2-1r for the reader's convenience. Since item 88 was not included in the 49-item analysis, there is no way to determine whether it might have helped define the factor. This splitting of the factor casts some doubt on the notion that the factor reflects a general attitude toward the way the Army provides for its people. However, the factor still reflects opinion on Army pay, so the title of the factor was not changed.

TABLE 2-1s

Factor XIX: Original Career Intention

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>	<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>	
1. When you first joined the Army, were you for or against making it a career?	-.663 1	.664 1	.712 1	
48. How much does getting promoted in your company depend upon doing a good job?	.528 2	-.451 2	-.612 2	

Again, the relationship of the two items which define Factor XIX is not apparent. The items load on opposite poles of the factor, indicating that respondents who were career oriented when entering the service tend to feel presently that doing a good job has little to do with promotion. However, the actual correlation between the items is only -.138. Though the exact nature of the factor is uncertain, it was very tentatively named Original Career Intention, based on the item with the higher loading.

The reversal of the signs of the loadings between the rotational solutions is of no consequence. Any factor can be rotated 180° to reverse the signs without changing the interpretation of the factor.

TABLE 2-1t

Factor XX: Drug Usage

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>	
	<u>Varimax Rotation</u>	<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>	
72. Is there a drug problem in your company?	.582	.567	.901	

Factor XX is defined by a single item, making any interpretation highly speculative. Unfortunately, it is the only item in the questionnaire concerned with drug usage. It was expected originally that drug usage would be symptomatic of other problems, and that the item would load on some other factor or factors appearing as an indicator of general satisfaction or dissatisfaction with the company. However, where drug usage was seen as a problem by the respondents, it seems to have been viewed as unrelated to other aspects of company functioning. The highest single correlation between this item and any other was only .289. The factor was title Drug Usage, but should be regarded as a tentative finding because of the single defining item.

TABLE 2-Iu

Factor XXI: Promotion Policy

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>
	<u>Varimax Rotation</u>	<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>
49. How important is it to be a "yes man" to get promoted in your company?	.595	.548	.906

Factor XXI, like the previous factor, is defined by a single item, in this case, related to promotion policy. Neither of the other items related to promotion (items 48 and 50) had appreciable loadings on this factor in either solution, the highest being .138. Nevertheless, at this point in the overall analysis of the questionnaire, it was decided to treat the factor as real, and it was named Promotion Policy.

TABLE 2-Iv

Factor XXII: Work Hours

<u>Item</u>	<u>99-Item Analysis</u>		<u>49-Item Analysis</u>
	<u>Varimax Rotation</u>	<u>Quartimax Rotation</u>	<u>Varimax Rotation</u>
4. How many hours do you spend on the job in an average week?	.664	.665	.919

Factor XXII is also defined by a single item, but again, it is the only item in the questionnaire concerned with time spent on the job. With considerable reservation, the factor was name Work Hours.

### Factor XXIII

The highest single loading on this factor in either rotation was .369. It was concluded that this factor resulted from chance error correlations, and therefore, it was not named.

### Partial Verification of the Factor Structure

The factor analyses resulted in 22 factors which were interpreted and named, although some of the interpretations were made with considerable reservation. However, as mentioned earlier, the analyses performed were considered exploratory in nature. It was deemed advisable to err in the direction of liberalism rather than conservatism in speculating on the reality and meaning of the factors extracted. Nevertheless, it seemed possible that some of the later factors, especially those defined by one or two items, were a result of chance correlated errors or peculiarities in the responses of a small number of soldiers. To partially test this possibility, the 674 protocols were divided in half by selecting every other case, starting with the first and repeating the entire analysis with these 337 respondents. There was no reason to suspect any bias in the ordering of cases which were arranged alphabetically within each company.

A comparison of the factors for this analysis with the factors for the entire group is presented in Table 2-2. The results for only the varimax rotations are presented. As can be seen from the table listing the defining variables, the interpretation of the factors based on the half sample would not differ from that based on the entire sample, except for two of the factors (Factors XXI and XXII) which were defined by single items. Each of these two items loaded on other factors in the half sample analysis. Two new factors also emerged in the half sample analysis, one defined by item 55 alone, and one defined by items 18 (How often do you think your platoon sergeant should talk to you when you are on the job?) and 57 (How satisfied are you with the leave policies in your company?). This latter factor, defined by two variables, is difficult to interpret. However, the results indicate that 20 of the factors are probably meaningful. Since the two factors which did not appear in the half sample analysis were very minor, a further verification employing the other half sample was not undertaken.

The sorted rotated loadings from the half sample analysis are presented in Appendix F. Loadings  $\leq .40$  are shown as "Os" to facilitate reading the table. The .40 cutoff was chosen as only "high" loadings, previously defined as those which account for 20 percent or more of the variance of an item, were to be shown. A cutoff of .447 would have been exact.

TABLE 2-2

Comparison of Defining Variables for Each Factor for the Full Sample  
and the Half Sample (unreplicated items are underlined)

<u>Factor</u>	<u>Full Sample</u>	<u>Half Sample</u>
I	51, 70, 74, 76, 80, 84	51, 70, <u>71</u> , 74, 76, 80, <u>83</u> , <u>84</u> , <u>85</u> , <u>86</u>
II	92, 93, 95, 96, 97, 98 99	92, 93, 95, 96, 97, 98, 99
III	7, 8, 9, 10, 11, 12, 19	7, 8, 9, 10, 11, 12, 19
IV	28, 29, 30, 33, 34, 43	28, 29, 30, 33, 34, 43
V	24, 25, 26, 27	24, 25, 26, 27
VI	35, 36, 37, 39, 44	35, 36, 37, 39, 44
VII	61, 62, 63, 64, 65	61, 62, 63, 64, 65
VIII	52, 75, 77, 81	52, 75, 77, 81
IX	<u>58</u> , 59, 60	59, 60, <u>66</u>
X	20, 22, 23, 78	20, 22, 23, 78
XI	53, 54, 56	53, 54, 56
XII	<u>37</u> , 38, 40	38, 40
XIII	2, 3	2, 3
XIV	67, 68, 69	67, 68, 69
XV	14, 16, <u>18</u>	14, 16, <u>49</u>
XVI	31, 32	<u>4</u> , 31, 32
XVII	15, 17	15, 17
XVIII	94, <u>66</u>	94
XIX	1, 48	1, 48
XX	72	72
XXI	<u>4</u>	
XXII	<u>49</u>	
New Factor A		<u>18</u> , <u>57</u>
New Factor B		<u>55</u>

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### Chapter 3

## DISCUSSION AND IMPLICATIONS FOR THE FUTURE

The factor analysis of the 99 items on the "Soldier Opinion Questionnaire" resulted in the extraction of 23 factors. Twenty-two of the factors were interpreted, although interpretations of some of the minor factors were made with considerable reservation. The same analysis was performed on half of the sample, and all but the last two of the same 22 factors emerged after rotation. This was deemed to have partially verified the existence of the factors in the data.

The items which appeared to be the best measures of each factor were selected from the original clusters, thus reducing the total number of items to 49. These items were then factor analyzed, and 21 of the original 22 factors reemerged following rotation. One of the minor factors split in this analysis. This result was essentially what was expected: measures of 33 factors were put into the analysis, so the same 22 factors were expected to reemerge. Nevertheless, this result was taken as a further verification of the existence of the majority of the factors in the data base. From the practical standpoint, it demonstrated that all of the major factors found could be assessed with approximately half the original number of items.

Obviously, a step to be taken in the future is to confirm the factors through an analysis of the data from a second administration of the questionnaire. However, some revision of the questionnaire should be made first. Some of the factors might be eliminated. For example, Factor XVIII, tentatively titled Remuneration, might be eliminated. Even if the hypothesis is correct that the factor reflects a general opinion on how well the Army provides for its personnel, this information is not of much value to a commander. The commander cannot increase pay, build new barracks, or otherwise exert much influence on Army-wide benefits. Since the questionnaire is being designed as an aid to commanders, factors over which they have little or no influence could probably be eliminated.

The revised questionnaire should also contain some additional items. Some items should be added in an attempt to "beef up" or further clarify the meaning of some of the "minor" factors defined by only one or two items. (For example, only one item on drug usage was included, and it defined a separate factor. Additional items should be added to determine how, if at all, drug usage affects company personnel and company effectiveness.) It should be noted that the term "minor," as used here, refers only to the percentage of the total variance accounted for by the factor, and not necessarily its importance. A minor factor in one analysis could become a major factor in another if more items with large proportions of variance in common with the original item(s) are added. The importance of the factor has to be determined separately by examining its relationship to external criteria. For example, it might be found that companies with a drug problem are rated low by battalion commanders and also have high AWOL rates. The fact that the Drug Usage factor was a minor factor in the analysis, because there was only one item concerned with drug usage, says nothing about its potential utility to a commander.

Additional items should also be written in an attempt to assess intended factors which did not emerge from the analysis. For example, the authors intended to assess the

soldiers' respect for their units. Items 84 (Overall, how well do you think your company is run?), 85 (Overall, how do you think your company compares to other companies), and 86 (How much do you think your company is respected on this post?) were intended to measure this factor. Apparently, the respondents saw these items in terms of leadership, as they loaded more heavily on Factor I (Quality of Officer Leadership) than any other factors. Perhaps differently worded items might bring out a separate "Respect for Unit" factor.

In addition to additions, deletions, and modifications of items, some changes in the order in which the questions are presented might be made. In the version of the questionnaire employed, the items designed to measure each factor tended to be clustered. For example, in the varimax rotation, Factor II (Reenlistment Potential) is defined by items 92, 93, 95, 96, 97, 98, and 99. It is possible that the respondents assumed a set toward the items and tended to respond to all in the same manner. Had the items been dispersed throughout the questionnaire, there would be less chance for a response set to develop. Whether such response sets did occur and whether they affected the results to a significant degree is not known.

As mentioned in Chapter I, the analyses described in this report are only a part of the overall analysis plan for the questionnaire. When all of the analyses are completed, a new version of the questionnaire will be drafted and administered to another large sample of young soldiers. This process will be repeated until an instrument with the desired characteristics is produced.

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**APPENDIX A**  
**Soldier Opinion Questionnaire**

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SOLDIER OPINION QUESTIONNAIRE



U.S.  
Army Research Institute  
For the Behavioral and Social Sciences  
Fort Hood Field Unit

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MESSAGE TO THE SOLDIER  
FROM THE ARMY RESEARCH INSTITUTE:

(Please Read Before Starting)

1. Please do not put your name on this questionnaire.
2. This questionnaire is being given to you by the Army Research Institute, not by your company. The purpose of the questionnaire is to give you a chance to freely state your opinions about your company and about life in the Army. Your opinions will be combined with those of the other soldiers in your company, and then a summary will be given to your commander to help him try to improve living, working, and training conditions in your company.
3. Please be completely truthful. Only honest answers can help.
4. All of the questions are multiple choice. Check only one answer for each question.
5. You may wish to write in a comment or suggestion by some of the questions. Feel free to do so. A typewritten summary of remarks from your company will be given to your company commander, but your individual questionnaire and answers will not.
6. Take your time. You may need about 45 minutes, more or less, to finish. Remain seated until everyone has finished and you are released. You will be asked to turn in your completed questionnaire as you leave.

Thank you for your help.

ARMY RESEARCH INSTITUTE (ARI)



1. When you first joined the Army, were you for or against making it a career?

- (a) \_\_\_\_\_ Strongly for
- (b) \_\_\_\_\_ Somewhat for
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Somewhat against
- (e) \_\_\_\_\_ Strongly against

2. How important is your duty MOS job to the Army?

- (a) \_\_\_\_\_ Very important
- (b) \_\_\_\_\_ Important
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Unimportant
- (e) \_\_\_\_\_ Very unimportant

3. How important is your duty MOS job to your company?

- (a) \_\_\_\_\_ Very important
- (b) \_\_\_\_\_ Important
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Unimportant
- (e) \_\_\_\_\_ Very unimportant

4. About how many hours do you spend on the job in a average week?

- (a) \_\_\_\_\_ 55 or more (If more, write in the number here: \_\_\_\_\_)
- (b) \_\_\_\_\_ 50
- (c) \_\_\_\_\_ 45
- (d) \_\_\_\_\_ 40
- (e) \_\_\_\_\_ 35 or less (If less, write in the number here: \_\_\_\_\_)

5. How useful is the work you do most of the time?

- (a) \_\_\_\_\_ Very useful
- (b) \_\_\_\_\_ Quite useful
- (c) \_\_\_\_\_ Somewhat useful
- (d) \_\_\_\_\_ Slightly useful
- (e) \_\_\_\_\_ Not useful at all

6. How much of your time on the job is spent doing useful work?

- (a) \_\_\_\_\_ 80 to 100 percent
- (b) \_\_\_\_\_ 60 to 79 percent
- (c) \_\_\_\_\_ 40 to 59 percent
- (d) \_\_\_\_\_ 20 to 39 percent
- (e) \_\_\_\_\_ 0 to 19 percent

7. How clear are your immediate supervisor's explanations of how to do your job?

- (a) \_\_\_\_\_ Very clear
- (b) \_\_\_\_\_ Clear
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Unclear
- (e) \_\_\_\_\_ Very unclear

8. How clear are the job objectives your immediate supervisor sets for you?

- (a) \_\_\_\_\_ Very clear
- (b) \_\_\_\_\_ Clear
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Unclear
- (e) \_\_\_\_\_ Very unclear

9. How much does your immediate supervisor like to hear your ideas about how your job should be done?

- (a) \_\_\_\_\_ Likes very much
- (b) \_\_\_\_\_ Likes
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Dislikes
- (e) \_\_\_\_\_ Dislikes very much

10. Is your immediate supervisor willing to listen to your work problems?

- (a) \_\_\_\_\_ Very willing
- (b) \_\_\_\_\_ Willing
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Unwilling
- (e) \_\_\_\_\_ Very unwilling

11. How much does your immediate supervisor care about how well people do their jobs?

- (a) \_\_\_\_\_ Very much
- (b) \_\_\_\_\_ Much
- (c) \_\_\_\_\_ Somewhat
- (d) \_\_\_\_\_ Little
- (e) \_\_\_\_\_ Very little

12. How friendly is your immediate supervisor?

- (a) \_\_\_\_\_ Very friendly
- (b) \_\_\_\_\_ Friendly
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Unfriendly
- (e) \_\_\_\_\_ Very unfriendly

13. How often does your company commander talk to you when you are on the job?

- (a) \_\_\_\_\_ 5 or more days a week
- (b) \_\_\_\_\_ 3 or 4 days a week
- (c) \_\_\_\_\_ 1 or 2 days a week
- (d) \_\_\_\_\_ 2 or 3 days a month
- (e) \_\_\_\_\_ 1 or less days a month

14. How often do you think your company commander should talk to you when you are on the job?

- (a) \_\_\_\_\_ Much more
- (b) \_\_\_\_\_ More
- (c) \_\_\_\_\_ O.K. as is
- (d) \_\_\_\_\_ Less
- (e) \_\_\_\_\_ Much less

15. How often does your platoon leader talk to you when you are on the job?

- (a) \_\_\_\_\_ 5 or more days a week
- (b) \_\_\_\_\_ 3 or 4 days a week
- (c) \_\_\_\_\_ 1 or 2 days a week
- (d) \_\_\_\_\_ 2 or 3 days a month
- (e) \_\_\_\_\_ 1 or less days a month

16. How often do you think your platoon leader should talk to you when you are on the job?

- (a) \_\_\_\_\_ Much more
- (b) \_\_\_\_\_ More
- (c) \_\_\_\_\_ O.K. as is
- (d) \_\_\_\_\_ Less
- (e) \_\_\_\_\_ Much less

17. How often does your platoon sergeant talk to you when you are on the job?

- (a) \_\_\_\_\_ 5 or more days a week
- (b) \_\_\_\_\_ 3 or 4 days a week
- (c) \_\_\_\_\_ 1 or 2 days a week
- (d) \_\_\_\_\_ 2 or 3 days a month
- (e) \_\_\_\_\_ 1 or less days a month

18. How often do you think your platoon sergeant should talk to you when you are on the job?

- (a) \_\_\_\_\_ Much more
- (b) \_\_\_\_\_ More
- (c) \_\_\_\_\_ U.K. as is
- (d) \_\_\_\_\_ Less
- (e) \_\_\_\_\_ Much less

19. How much freedom do you have to do your job the way you think it should be done?

- (a) \_\_\_\_\_ Very much
- (b) \_\_\_\_\_ Much
- (c) \_\_\_\_\_ Some
- (d) \_\_\_\_\_ Little
- (e) \_\_\_\_\_ Very little

20. Does "obeying the rules" ever make it hard to get your job done?

- (a) \_\_\_\_\_ Very seldom, or never
- (b) \_\_\_\_\_ Seldom
- (c) \_\_\_\_\_ Sometimes
- (d) \_\_\_\_\_ Often
- (e) \_\_\_\_\_ Very often

21. How much responsibility are you given in your job?

- (a) \_\_\_\_\_ Very much
- (b) \_\_\_\_\_ Much
- (c) \_\_\_\_\_ Some
- (d) \_\_\_\_\_ Little
- (e) \_\_\_\_\_ Very little

22. How easy is it to get the right equipment to do your job?

- (a) \_\_\_\_\_ Very easy
- (b) \_\_\_\_\_ Easy
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Hard
- (e) \_\_\_\_\_ Very hard

23. In what condition is the equipment you usually work with?

- (a) \_\_\_\_\_ Very good
- (b) \_\_\_\_\_ Good
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Bad
- (e) \_\_\_\_\_ Very bad

24. How interesting is your job?

- (a) \_\_\_\_\_ Very interesting
- (b) \_\_\_\_\_ Interesting
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Uninteresting
- (e) \_\_\_\_\_ Very uninteresting

25. How do you like your job?

- (a) \_\_\_\_\_ Very much
- (b) \_\_\_\_\_ Much
- (c) \_\_\_\_\_ Somewhat
- (d) \_\_\_\_\_ Little
- (e) \_\_\_\_\_ Very little

26. How well does your job make use of your abilities?

- (a) \_\_\_\_\_ Very well
- (b) \_\_\_\_\_ Well
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Poorly
- (e) \_\_\_\_\_ Very poorly

27. How useful do you think the skills you use in your job will be to you later on?

- (a) \_\_\_\_\_ Very useful
- (b) \_\_\_\_\_ Quite useful
- (c) \_\_\_\_\_ Somewhat useful
- (d) \_\_\_\_\_ Slightly useful
- (e) \_\_\_\_\_ Not useful at all

28. How well do the people in your company work together?

- (a) \_\_\_\_\_ Very well
- (b) \_\_\_\_\_ Well
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Poorly
- (e) \_\_\_\_\_ Very poorly

29. How much do the soldiers in your company make each other feel like doing a good job?

- (a) \_\_\_\_\_ Very much
- (b) \_\_\_\_\_ Much
- (c) \_\_\_\_\_ Somewhat
- (d) \_\_\_\_\_ Little
- (e) \_\_\_\_\_ Very little

30. On the average, how well do the people you work with do their jobs?

- (a) \_\_\_\_\_ Very well
- (b) \_\_\_\_\_ Well
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Poorly
- (e) \_\_\_\_\_ Very poorly

31. How hard do you work in your job?

- (a) \_\_\_\_\_ Very hard
- (b) \_\_\_\_\_ Hard
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Not hard
- (e) \_\_\_\_\_ Not hard at all

32. How hard do you work compared to most others in your company?

- (a) \_\_\_\_\_ Much harder
- (b) \_\_\_\_\_ Harder
- (c) \_\_\_\_\_ About the same
- (d) \_\_\_\_\_ Less hard
- (e) \_\_\_\_\_ Much less hard

33. How many soldiers in your company do you think are good soldiers?

- (a) \_\_\_\_\_ 80 to 100 percent
- (b) \_\_\_\_\_ 60 to 79 percent
- (c) \_\_\_\_\_ 40 to 59 percent
- (d) \_\_\_\_\_ 20 to 39 percent
- (e) \_\_\_\_\_ 0 to 19 percent

34. What percentage of the soldiers in your company perform so poorly that the unit might be better off without them?

- (a) \_\_\_\_\_ 0 to 10 percent
- (b) \_\_\_\_\_ 11 to 20 percent
- (c) \_\_\_\_\_ 21 to 30 percent
- (d) \_\_\_\_\_ 31 to 40 percent
- (e) \_\_\_\_\_ 41 percent, or more

35. How much attention is given to MOS training in your company?

- (a) \_\_\_\_\_ Very much
- (b) \_\_\_\_\_ Much
- (c) \_\_\_\_\_ Some
- (d) \_\_\_\_\_ Little
- (e) \_\_\_\_\_ Very little

36. Do you get enough MOS training in your company?

- (a) ☐ More than enough
- (b) ☐ Enough
- (c) ☐ Borderline
- (d) ☐ Not enough
- (e) ☐ Not nearly enough

37. How hard is the combat training you get in your company?

- (a) ☐ Very hard
- (b) ☐ Hard
- (c) ☐ Borderline
- (d) ☐ Easy
- (e) ☐ Very easy

38. Should the combat training in your present company be harder or easier?

- (a) ☐ Much harder
- (b) ☐ Harder
- (c) ☐ O.K. as is
- (d) ☐ Easier
- (e) ☐ Much easier

39. How good is the combat training you get in your company?

- (a) ☐ Very good
- (b) ☐ Good
- (c) ☐ Borderline
- (d) ☐ Bad
- (e) ☐ Very bad

40. Do you think your company should get more or less combat training?

- (a) ☐ Much more
- (b) ☐ More
- (c) ☐ No change
- (d) ☐ Less
- (e) ☐ Much less

41. How useful are your company's field exercises?

- (a) ☐ Very useful
- (b) ☐ Quite useful
- (c) ☐ Somewhat useful
- (d) ☐ Slightly useful
- (e) ☐ Not useful at all

42. In your company, how much training time is wasted by doing nothing useful?

- (a) \_\_\_\_\_ Very little, or none
- (b) \_\_\_\_\_ Little
- (c) \_\_\_\_\_ Some
- (d) \_\_\_\_\_ Much
- (e) \_\_\_\_\_ Very much

43. How many of the soldiers in your company really want to do well in training?

- (a) \_\_\_\_\_ 80 to 100 percent
- (b) \_\_\_\_\_ 60 to 79 percent
- (c) \_\_\_\_\_ 40 to 59 percent
- (d) \_\_\_\_\_ 20 to 39 percent
- (e) \_\_\_\_\_ 0 to 19 percent

44. How is the physical training program in your company?

- (a) \_\_\_\_\_ Very good
- (b) \_\_\_\_\_ Good
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Bad
- (e) \_\_\_\_\_ Very bad

45. How are the training instructors in your company?

- (a) \_\_\_\_\_ Very good
- (b) \_\_\_\_\_ Good
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Bad
- (e) \_\_\_\_\_ Very bad

46. How challenging is the training you get in your company?

- (a) \_\_\_\_\_ Very challenging
- (b) \_\_\_\_\_ Challenging
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Unchallenging
- (e) \_\_\_\_\_ Very unchallenging

47. How much does your company encourage soldiers to get more formal education?

- (a) \_\_\_\_\_ Very much
- (b) \_\_\_\_\_ Much
- (c) \_\_\_\_\_ Somewhat
- (d) \_\_\_\_\_ Little
- (e) \_\_\_\_\_ Very little, or not at all



48. How much does getting promoted in your company depend upon doing a good job?

- (a) \_\_\_\_\_ Very much
- (b) \_\_\_\_\_ Much
- (c) \_\_\_\_\_ Somewhat
- (d) \_\_\_\_\_ Little
- (e) \_\_\_\_\_ Very little

49. How important is it to be a "yes man" to get promoted in your company?

- (a) \_\_\_\_\_ Not important at all
- (b) \_\_\_\_\_ Slightly important
- (c) \_\_\_\_\_ Somewhat important
- (d) \_\_\_\_\_ Quite important
- (e) \_\_\_\_\_ Very important

50. Are you satisfied with the promotion policy in your company?

- (a) \_\_\_\_\_ Very satisfied
- (b) \_\_\_\_\_ Satisfied
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Dissatisfied
- (e) \_\_\_\_\_ Very dissatisfied

51. Do the commissioned officers in your company treat you with respect?

- (a) \_\_\_\_\_ Always, or almost always
- (b) \_\_\_\_\_ Often
- (c) \_\_\_\_\_ Sometimes
- (d) \_\_\_\_\_ Seldom
- (e) \_\_\_\_\_ Never, or hardly ever

52. Do the NCOs in your company treat you with respect?

- (a) \_\_\_\_\_ Always, or almost always
- (b) \_\_\_\_\_ Often
- (c) \_\_\_\_\_ Sometimes
- (d) \_\_\_\_\_ Seldom
- (e) \_\_\_\_\_ Never, or hardly ever

53. How high are the standards of discipline in your company?

- (a) \_\_\_\_\_ Very high
- (b) \_\_\_\_\_ High
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Low
- (e) \_\_\_\_\_ Very low

54. How high should the standards of discipline be in your company?

- (a) ☐ Much higher
- (b) ☐ Higher
- (c) ☐ About the same
- (d) ☐ Lower
- (e) ☐ Much lower

55. How high are the standards of military courtesy in your company?

- (a) ☐ Very high
- (b) ☐ High
- (c) ☐ Borderline
- (d) ☐ Low
- (e) ☐ Very low

56. How high should the standards of military courtesy be in your company?

- (a) ☐ Much higher
- (b) ☐ Higher
- (c) ☐ About the same
- (d) ☐ Lower
- (e) ☐ Much lower

57. How satisfied are you with the leave policies in your company?

- (a) ☐ Very satisfied
- (b) ☐ Satisfied
- (c) ☐ Borderline
- (d) ☐ Unsatisfied
- (e) ☐ Very unsatisfied

58. How much are sports activities encouraged in your company?

- (a) ☐ Very much
- (b) ☐ Much
- (c) ☐ Somewhat
- (d) ☐ Little
- (e) ☐ Very little, or not at all

59. Are there enough social activities in your company?

- (a) ☐ Far too many
- (b) ☐ Too many
- (c) ☐ About right
- (d) ☐ Too few
- (e) ☐ Far too few

60. Are you satisfied with the kind of social activities in your company?

- (a) ☐ Very satisfied
- (b) ☐ Satisfied
- (c) ☐ Borderline
- (d) ☐ Unsatisfied
- (e) ☐ Very unsatisfied

61. How good is the food in your mess hall?

- (a) ☐ Very good
- (b) ☐ Good
- (c) ☐ Borderline
- (d) ☐ Bad
- (e) ☐ Very bad

62. Do you get enough to eat in your mess hall?

- (a) ☐ 80 to 100 percent of the time
- (b) ☐ 60 to 79 percent of the time
- (c) ☐ 40 to 59 percent of the time
- (d) ☐ 20 to 39 percent of the time
- (e) ☐ 0 to 19 percent of the time

63. How clean is your mess hall?

- (a) ☐ Very clean
- (b) ☐ Clean
- (c) ☐ Borderline
- (d) ☐ Dirty
- (e) ☐ Very dirty

64. How good is the food you get in the field?

- (a) ☐ Very good
- (b) ☐ Good
- (c) ☐ Borderline
- (d) ☐ Bad
- (e) ☐ Very bad

65. Do you get enough to eat when you are in the field?

- (a) \_\_\_\_\_ 80 to 100 percent of the time
- (b) \_\_\_\_\_ 60 to 79 percent of the time
- (c) \_\_\_\_\_ 40 to 59 percent of the time
- (d) \_\_\_\_\_ 20 to 39 percent of the time
- (e) \_\_\_\_\_ 0 to 19 percent of the time

66. How are your barracks?

- (a) \_\_\_\_\_ Very good
- (b) \_\_\_\_\_ Good
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Bad
- (e) \_\_\_\_\_ Very bad

67. How are race relations in your company?

- (a) \_\_\_\_\_ Very good
- (b) \_\_\_\_\_ Good
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Bad
- (e) \_\_\_\_\_ Very bad

68. How fairly are racial problems handled in your company?

- (a) \_\_\_\_\_ Very fairly
- (b) \_\_\_\_\_ Fairly
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Unfairly
- (e) \_\_\_\_\_ Very unfairly

69. Is the treatment of minority racial groups in your company better or worse than in civilian life?

- (a) \_\_\_\_\_ Much better than in civilian life
- (b) \_\_\_\_\_ Better
- (c) \_\_\_\_\_ About the same
- (d) \_\_\_\_\_ Worse
- (e) \_\_\_\_\_ Much worse than in civilian life

70. How easy do you think it is to get to see your company commander to discuss personal problems?

- (a) \_\_\_\_\_ Very easy
- (b) \_\_\_\_\_ Easy
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Hard
- (e) \_\_\_\_\_ Very hard

71. If you go to your company commander with a personal problem, how well do you think he will treat you?

- (a) \_\_\_\_\_ Very well
- (b) \_\_\_\_\_ Well
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Badly
- (e) \_\_\_\_\_ Very badly

72. Is there a drug problem in your company?

- (a) \_\_\_\_\_ Very small, or no problem
- (b) \_\_\_\_\_ Small problem
- (c) \_\_\_\_\_ Moderate problem
- (d) \_\_\_\_\_ Big problem
- (e) \_\_\_\_\_ Very big problem

73. How well does your company keep you informed about important matters, such as training schedules and company policies?

- (a) \_\_\_\_\_ Very well
- (b) \_\_\_\_\_ Well
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Poorly
- (e) \_\_\_\_\_ Very poorly

74. How much do the commissioned officers in your company care about the needs of their people?

- (a) \_\_\_\_\_ Very much
- (b) \_\_\_\_\_ Much
- (c) \_\_\_\_\_ Somewhat
- (d) \_\_\_\_\_ Little
- (e) \_\_\_\_\_ Very little

75. How much do the NCOs in your company care about the needs of their people?

- (a) \_\_\_\_\_ Very much
- (b) \_\_\_\_\_ Much
- (c) \_\_\_\_\_ Somewhat
- (d) \_\_\_\_\_ Little
- (e) \_\_\_\_\_ Very little

76. How well do the commissioned officers in your company do their jobs?

- (a) \_\_\_\_\_ Very well
- (b) \_\_\_\_\_ Well
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Poorly
- (e) \_\_\_\_\_ Very poorly

77. How well do the NCOs in your company do their jobs?

- (a) \_\_\_\_\_ Very well
- (b) \_\_\_\_\_ well
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Poorly
- (e) \_\_\_\_\_ Very poorly

78. How many "mickey-mouse" rules does your company have?

- (a) \_\_\_\_\_ Very few
- (b) \_\_\_\_\_ Few
- (c) \_\_\_\_\_ Some
- (d) \_\_\_\_\_ Many
- (e) \_\_\_\_\_ Very many

79. How much harassment of the soldiers is there in your company?

- (a) \_\_\_\_\_ Very little, or none
- (b) \_\_\_\_\_ Little
- (c) \_\_\_\_\_ Some
- (d) \_\_\_\_\_ Much
- (e) \_\_\_\_\_ Very much

80. As leaders, how are your company's commissioned officers?

- (a) \_\_\_\_\_ Very good
- (b) \_\_\_\_\_ Good
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Bad
- (e) \_\_\_\_\_ Very bad

81. As leaders, how are your company's NCOs?

- (a) \_\_\_\_\_ Very good
- (b) \_\_\_\_\_ Good
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Bad
- (e) \_\_\_\_\_ Very bad

82. How is your morale?

- (a) \_\_\_\_\_ Very high
- (b) \_\_\_\_\_ High
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Low
- (e) \_\_\_\_\_ Very low

83. How is the morale of other soldiers in your company?

- (a) ☐ Very high
- (b) ☐ High
- (c) ☐ Borderline
- (d) ☐ Low
- (e) ☐ Very low

84. Overall, how well do you think your company is run?

- (a) ☐ Very well
- (b) ☐ Well
- (c) ☐ Borderline
- (d) ☐ Poorly
- (e) ☐ Very poorly

85. Overall, how do you think your company compares to other companies?

- (a) ☐ Much better
- (b) ☐ Better
- (c) ☐ About the same
- (d) ☐ Worse
- (e) ☐ Much worse

86. How much do you think your company is respected on this post?

- (a) ☐ Very much
- (b) ☐ Much
- (c) ☐ Somewhat
- (d) ☐ Little
- (e) ☐ Very little

87. How important is the Army for the defense of the country?

- (a) ☐ Very important
- (b) ☐ Important
- (c) ☐ Borderline
- (d) ☐ Unimportant
- (e) ☐ Very unimportant

88. Do you think the Army is concerned about you as an individual?

- (a) ☐ Very concerned
- (b) ☐ Concerned
- (c) ☐ Borderline
- (d) ☐ Unconcerned
- (e) ☐ Very unconcerned

89. How much does the Army reward or punish soldiers who "think for themselves"?

- (a) \_\_\_\_\_ Rewards greatly
- (b) \_\_\_\_\_ Rewards somewhat
- (c) \_\_\_\_\_ Neither rewards nor punishes
- (d) \_\_\_\_\_ Punishes somewhat
- (e) \_\_\_\_\_ Punishes greatly

90. How many of the Army's rules and regulations do you think are needed for a good Army?

- (a) \_\_\_\_\_ All, or nearly all
- (b) \_\_\_\_\_ Most
- (c) \_\_\_\_\_ Some
- (d) \_\_\_\_\_ A few
- (e) \_\_\_\_\_ None, or almost none

91. Overall, how well do you think the Army is run?

- (a) \_\_\_\_\_ Very well
- (b) \_\_\_\_\_ Well
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Poorly
- (e) \_\_\_\_\_ Very poorly

92. How do you feel about being in the Army?

- (a) \_\_\_\_\_ Very proud
- (b) \_\_\_\_\_ Proud
- (c) \_\_\_\_\_ Neither proud nor ashamed
- (d) \_\_\_\_\_ Ashamed
- (e) \_\_\_\_\_ Very ashamed

93. Overall, how much do you like Army life?

- (a) \_\_\_\_\_ Like very much
- (b) \_\_\_\_\_ Like
- (c) \_\_\_\_\_ Borderline
- (d) \_\_\_\_\_ Dislike
- (e) \_\_\_\_\_ Dislike very much

94. How do you feel your Army pay compares to the pay you could get in civilian life?

- (a) \_\_\_\_\_ Much more than in civilian life
- (b) \_\_\_\_\_ More
- (c) \_\_\_\_\_ About the same
- (d) \_\_\_\_\_ Less
- (e) \_\_\_\_\_ Much less than in civilian life



95. How much will your decision to reenlist or not reenlist depend on your being able to get a good job in civilian life?

- (a) ☐ Very much
- (b) ☐ Much
- (c) ☐ Somewhat
- (d) ☐ Little
- (e) ☐ Very little

96. Would you encourage civilian friends to enlist in the Army?

- (a) ☐ Encourage strongly
- (b) ☐ Encourage
- (c) ☐ Neither encourage nor discourage
- (d) ☐ Discourage
- (e) ☐ Discourage strongly

97. How do you feel at this time about reenlisting for another term?

- (a) ☐ Strongly for
- (b) ☐ Somewhat for
- (c) ☐ Borderline
- (d) ☐ Somewhat against
- (e) ☐ Strongly against

98. How do you feel at this time about making the Army a career?

- (a) ☐ Strongly for
- (b) ☐ Somewhat for
- (c) ☐ Borderline
- (d) ☐ Somewhat against
- (e) ☐ Strongly against

99. If you could have an honorable discharge at this time, would you prefer to stay in or get out?

- (a) ☐ Much prefer to stay in
- (b) ☐ Prefer to stay in
- (c) ☐ Undecided
- (d) ☐ Prefer to get out
- (e) ☐ Much prefer to get out

100. Other remarks. Thank you for answering the many questions above. If you have other comments or suggestions about your company or your life in the Army, please write them on the back of this page.

(Turn page and continue with Background Questions)

ARMY RESEARCH INSTITUTE (ARI)

BACKGROUND QUESTIONS

(Please Read Before Continuing)

1. Your answers to a few background questions, which start on the next page, are needed by the Army Research Institute to improve the questionnaire you have just filled out.
2. Your answers will not be given or shown to your company commander or to any other person in your company. They will stay with the Army Research Institute.
3. Again, do not write in your name; we do not need to identify you as a specific individual.

ARMY RESEARCH INSTITUTE (ARI)

BACKGROUND QUESTIONS

(For ARI Research Purposes Only)

(Do Not Write Your Name)

1. Write in the names of your battalion and company.

Battalion: \_\_\_\_\_

Company: \_\_\_\_\_

2. How long have you been in your present company?

\_\_\_\_\_ years and \_\_\_\_\_ months

3. How long have you been in the Army?

\_\_\_\_\_ years and \_\_\_\_\_ months

4. How big was your home town when you joined the Army? (Choose the closest number.)

\_\_\_\_\_ a. 1 thousand  
\_\_\_\_\_ b. 5 thousand  
\_\_\_\_\_ c. 10 thousand  
\_\_\_\_\_ d. 25 thousand  
\_\_\_\_\_ e. 50 thousand

\_\_\_\_\_ f. 100 thousand  
\_\_\_\_\_ g. 250 thousand  
\_\_\_\_\_ h. 500 thousand  
\_\_\_\_\_ i. 1 million  
\_\_\_\_\_ j. 2 million or more

5. Are you now working in your primary MOS?

\_\_\_\_\_ a. Yes  
\_\_\_\_\_ b. No

6. What is your pay grade?

\_\_\_\_\_ a. E-1  
\_\_\_\_\_ b. E-2  
\_\_\_\_\_ c. E-3  
\_\_\_\_\_ d. E-4  
\_\_\_\_\_ e. E-5

7. How many years of formal education (elementary, high school, college, etc.) have you had?
- \_\_\_\_\_ years
8. If you have a high school diploma, what kind is it?
- \_\_\_\_\_ a. Do not have diploma  
\_\_\_\_\_ b. Regular  
\_\_\_\_\_ c. GED
9. If you have a college degree, what kind is it?
- \_\_\_\_\_ a. Do not have degree  
\_\_\_\_\_ b. Associate (2-year)  
\_\_\_\_\_ c. Bachelor (4-year)  
\_\_\_\_\_ d. Other: \_\_\_\_\_
10. Are you now taking any courses to improve your education or your job skills?
- \_\_\_\_\_ a. Yes  
\_\_\_\_\_ b. No
11. Would you like to take courses (or more courses) to improve your education?
- \_\_\_\_\_ a. Yes  
\_\_\_\_\_ b. No
12. Would you like to take courses (or more courses) to improve your job skills?
- \_\_\_\_\_ a. Yes  
\_\_\_\_\_ b. No
13. Where do you live?
- \_\_\_\_\_ a. Barracks  
\_\_\_\_\_ b. On-post housing (BEQ, family housing)  
\_\_\_\_\_ c. Off-post housing
14. When were you born?
- Month: \_\_\_\_\_ Year: \_\_\_\_\_

15. Marital status:

- ☐ a. Single
- ☐ b. Married
- ☐ c. Divorced
- ☐ d. Other

16. Sex:

- ☐ Female
- ☐ Male

17. To what ethnic (racial) group do you belong?

- ☐ a. American Indian (Native American)
- ☐ b. Black
- ☐ c. Mexican-American
- ☐ d. Oriental
- ☐ e. Puerto Rican
- ☐ f. White (Caucasian, Anglo-American)
- ☐ g. Other: \_\_\_\_\_

THANK YOU FOR YOUR PARTICIPATION

Please remain seated until you are dismissed.  
You will turn in your questionnaire at that time.

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## **APPENDIX B**

**The Intercorrelation Matrix of the 99 Items  
in the "Soldier Opinion Questionnaire"**

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# The Intercorrelation Matrix of the 99 Items in the "Soldier Opinion Questionnaire"

## CORRELATION MATRIX

	Q1	2	3	4	5	6	7	8	9	10	11	12	13	14
Q1	1.000													
Q2	0.215	1.000												
Q3	0.091	0.564	1.000											
Q4	0.132	-0.014	0.098	1.000										
Q5	0.045	0.347	0.370	0.370	1.000									
Q6	-0.007	0.209	0.301	0.301	-0.004	1.000								
Q7	0.068	0.229	0.243	0.243	-0.008	0.490	1.000							
Q8	0.044	0.203	0.220	0.220	-0.009	0.287	0.242	1.000						
Q9	-0.045	0.228	0.256	0.256	0.014	0.307	0.285	0.562	1.000					
Q10	-0.017	0.263	0.246	0.246	-0.043	0.307	0.287	0.495	0.488	1.000				
Q11	0.045	0.230	0.268	0.268	0.018	0.254	0.204	0.461	0.437	0.656	1.000			
Q12	0.037	0.212	0.258	0.258	-0.019	0.284	0.198	0.386	0.382	0.476	0.554	1.000		
Q13	0.046	0.097	0.157	0.157	-0.030	0.256	0.204	0.427	0.399	0.584	0.597	0.441	1.000	
Q14	0.088	0.108	0.109	0.109	0.062	0.199	0.250	0.492	0.399	0.584	0.597	0.441	0.228	1.000
Q15	0.019	0.116	0.154	0.154	0.084	0.126	0.140	0.117	0.111	0.164	0.239	0.228	0.099	-0.016
Q16	0.080	0.096	0.048	0.048	-0.017	0.171	0.143	0.183	0.166	0.182	0.185	0.205	0.266	0.241
Q17	0.015	0.140	0.137	0.137	0.061	0.085	0.105	0.105	0.146	0.158	0.122	0.127	0.153	0.102
Q18	0.088	0.106	0.140	0.140	-0.008	0.199	0.156	0.107	0.181	0.131	0.238	0.283	0.265	0.186
Q19	-0.006	0.198	0.192	0.192	-0.095	0.320	0.263	0.329	0.360	0.446	0.441	0.313	0.407	0.119
Q20	0.067	0.129	0.115	0.115	-0.060	0.245	0.235	0.292	0.277	0.307	0.283	0.228	0.252	0.257
Q21	-0.095	0.230	0.236	0.236	0.098	0.379	0.291	0.296	0.285	0.349	0.313	0.301	0.286	0.193
Q22	0.048	0.101	0.121	0.121	-0.110	0.242	0.309	0.305	0.316	0.282	0.247	0.235	0.183	0.226
Q23	-0.019	0.164	0.166	0.166	-0.128	0.315	0.301	0.290	0.268	0.250	0.258	0.212	0.205	0.167
Q24	0.132	0.132	0.285	0.285	-0.045	0.410	0.357	0.273	0.270	0.268	0.286	0.251	0.285	0.283
Q25	0.163	0.272	0.224	0.224	-0.051	0.354	0.307	0.268	0.284	0.268	0.286	0.252	0.269	0.288
Q26	0.059	0.211	0.224	0.224	-0.068	0.374	0.343	0.271	0.275	0.282	0.255	0.232	0.240	0.208
Q27	0.084	0.178	0.198	0.198	-0.085	0.353	0.282	0.155	0.195	0.249	0.231	0.138	0.209	0.194
Q28	-0.008	0.155	0.223	0.223	-0.079	0.166	0.218	0.250	0.275	0.274	0.309	0.283	0.318	0.190
Q29	-0.037	0.245	0.245	0.245	-0.082	0.308	0.327	0.292	0.301	0.403	0.337	0.280	0.322	0.262
Q30	0.014	0.207	0.199	0.199	-0.034	0.190	0.215	0.332	0.314	0.333	0.164	0.297	0.330	0.160
Q31	0.183	0.230	0.290	0.290	0.170	0.269	0.314	0.194	0.163	0.167	0.170	0.199	0.165	0.098
Q32	0.053	0.193	0.146	0.146	0.133	0.140	0.153	0.139	0.064	0.131	0.097	0.097	0.077	0.074
Q33	0.053	0.195	0.252	0.252	-0.010	0.224	0.327	0.218	0.238	0.291	0.267	0.292	0.257	0.188
Q34	0.060	0.125	0.126	0.126	-0.095	0.097	0.184	0.191	0.213	0.166	0.175	0.197	0.165	0.108
Q35	-0.047	0.143	0.189	0.189	0.004	0.192	0.198	0.247	0.179	0.222	0.283	0.258	0.210	0.175
Q36	-0.110	0.053	0.110	0.110	0.031	0.109	0.157	0.225	0.166	0.169	0.196	0.201	0.166	0.099
Q37	-0.012	0.071	0.120	0.120	0.053	0.137	0.204	0.190	0.147	0.226	0.183	0.170	0.163	0.071
Q38	0.218	0.159	0.069	0.069	0.043	0.058	-0.048	0.106	0.115	0.096	0.109	0.096	0.143	0.163
Q39	-0.023	0.158	0.183	0.183	-0.043	0.240	-0.286	0.296	0.253	0.276	0.253	0.302	0.287	0.227
Q40	0.189	0.202	0.192	0.192	0.004	0.059	-0.016	0.089	0.088	0.092	0.119	0.105	0.154	0.162
Q41	-0.038	0.207	0.172	0.172	-0.030	0.232	0.331	0.300	0.272	0.271	0.247	0.306	0.306	0.207
Q42	0.120	0.107	0.114	0.114	-0.046	0.214	0.347	0.236	0.235	0.230	0.234	0.226	0.226	0.097
Q43	0.031	0.173	0.173	0.173	0.036	0.216	0.256	0.178	0.162	0.189	0.120	0.191	0.111	0.168
Q44	-0.011	0.109	0.075	0.075	-0.073	0.164	0.220	0.221	0.157	0.151	0.124	0.121	0.137	0.093
Q45	-0.023	0.219	0.166	0.166	-0.088	0.245	0.262	0.365	0.338	0.313	0.341	0.338	0.340	0.226
Q46	-0.099	0.187	0.230	0.230	-0.018	0.303	0.342	0.379	0.379	0.320	0.319	0.319	0.303	0.163
Q47	-0.087	0.150	0.231	0.231	-0.124	0.244	0.194	0.267	0.184	0.306	0.287	0.255	0.282	0.265
Q48	-0.138	0.163	0.213	0.213	-0.066	0.251	0.237	0.224	0.237	0.247	0.267	0.273	0.239	0.161
Q49	-0.031	-0.046	-0.302	-0.302	-0.115	0.048	0.074	0.156	0.148	0.171	0.152	0.060	0.107	0.093
Q50	-0.022	0.143	0.199	0.199	-0.121	0.214	0.262	0.262	0.271	0.335	0.350	0.255	0.305	0.236

	Q1	2	32	3	Q3	4	34	5	Q5	6	Q6	7	8	Q8	9	Q9	10	Q10	11	Q11	12	Q12	13	Q13	14
Q51		0.016		0.151		0.177	-0.006		0.244		0.209		0.298		0.301		0.347		0.360		0.265		0.334		0.256
Q52		0.066		0.138		0.154	0.001		0.218		0.216		0.304		0.329		0.395		0.403		0.334		0.410		0.224
Q53		-0.003		0.071		0.083	-0.086		0.131		0.137		0.201		0.193		0.149		0.154		0.227		0.155		0.082
Q54		0.167		0.070		0.072	0.135		0.103		0.082		0.051		0.052		0.088		0.047		0.064		0.040		0.115
Q55		0.031		0.192		0.127	-0.082		0.153		0.207		0.286		0.283		0.208		0.191		0.219		0.200		0.167
Q56		0.181		0.100		0.095	0.096		0.153		0.096		0.110		0.095		0.077		0.099		0.126		0.114		0.189
Q57		-0.003		0.208		0.161	-0.128		0.225		0.176		0.260		0.258		0.229		0.284		0.214		0.298		0.283
Q58		-0.047		0.095		0.078	-0.117		0.124		0.180		0.133		0.158		0.137		0.203		0.161		0.165		0.281
Q59		-0.058		0.071		0.005	-0.111		0.093		0.111		0.154		0.134		0.154		0.220		0.188		0.172		0.198
Q60		-0.020		0.129		0.098	-0.127		0.090		0.169		0.175		0.183		0.200		0.257		0.194		0.199		0.155
Q61		0.050		0.120		0.074	-0.105		0.046		0.104		0.161		0.183		0.150		0.167		0.051		0.163		0.122
Q62		0.008		0.070		0.062	-0.100		0.134		0.132		0.127		0.149		0.114		0.190		0.125		0.169		0.093
Q63		0.015		0.114		0.092	-0.080		0.197		0.138		0.183		0.241		0.174		0.201		0.100		0.180		0.110
Q64		0.084		0.115		0.117	-0.041		0.143		0.115		0.141		0.183		0.134		0.155		0.121		0.191		0.134
Q65		0.044		0.102		0.069	-0.025		0.168		0.141		0.128		0.136		0.132		0.180		0.152		0.182		0.093
Q66		0.056		0.102		0.098	-0.057		0.328		0.086		0.181		0.179		0.296		0.274		0.294		0.237		0.084
Q67		0.057		0.093		0.099	-0.102		0.220		0.210		0.273		0.266		0.315		0.312		0.262		0.340		0.205
Q68		0.033		0.115		0.142	-0.119		0.093		0.077		0.187		0.205		0.276		0.202		0.210		0.208		0.113
Q69		-0.072		0.182		0.179	-0.032		0.220		0.226		0.269		0.152		0.201		0.202		0.202		0.222		0.327
Q70		0.027		0.124		0.154	-0.008		0.144		0.187		0.205		0.213		0.281		0.352		0.270		0.314		0.335
Q71		0.063		0.217		0.205	-0.060		0.213		0.225		0.126		0.195		0.125		0.187		0.133		0.157		0.095
Q72		-0.034		0.103		0.106	-0.091		0.073		0.182		0.156		0.267		0.292		0.291		0.288		0.276		0.219
Q73		0.027		0.174		0.184	-0.087		0.242		0.291		0.355		0.311		0.423		0.424		0.338		0.368		0.289
Q74		0.015		0.186		0.213	-0.081		0.221		0.258		0.381		0.339		0.389		0.447		0.354		0.415		0.201
Q75		0.058		0.165		0.157	-0.056		0.182		0.195		0.357		0.301		0.339		0.341		0.333		0.344		0.293
Q76		-0.021		0.148		0.168	-0.027		0.151		0.121		0.384		0.350		0.365		0.374		0.377		0.391		0.216
Q77		0.066		0.184		0.164	-0.064		0.229		0.236		0.189		0.207		0.254		0.332		0.186		0.218		0.200
Q78		0.023		0.078		0.087	-0.103		0.223		0.236		0.284		0.270		0.329		0.328		0.298		0.366		0.259
Q79		0.021		0.173		0.179	-0.048		0.223		0.236		0.284		0.270		0.329		0.328		0.298		0.366		0.259
Q80		0.019		0.148		0.157	-0.071		0.208		0.213		0.281		0.284		0.336		0.324		0.308		0.316		0.275
Q81		-0.063		0.187		0.171	-0.054		0.157		0.217		0.345		0.377		0.372		0.395		0.357		0.415		0.219
Q82		0.050		0.140		0.149	-0.056		0.256		0.221		0.320		0.257		0.342		0.308		0.248		0.293		0.217
Q83		-0.001		0.166		0.151	-0.087		0.231		0.298		0.291		0.296		0.302		0.316		0.255		0.270		0.242
Q84		0.013		0.169		0.197	-0.087		0.287		0.323		0.362		0.346		0.351		0.336		0.328		0.162		0.297
Q85		-0.012		0.139		0.166	-0.131		0.215		0.233		0.230		0.302		0.252		0.274		0.274		0.309		0.273
Q86		-0.011		0.180		0.146	-0.131		0.194		0.205		0.226		0.257		0.272		0.236		0.218		0.217		0.189
Q87		0.132		0.294		0.203	-0.036		0.178		0.086		0.151		0.202		0.134		0.149		0.131		0.139		0.057
Q88		0.042		0.202		0.196	-0.109		0.296		0.258		0.283		0.267		0.326		0.341		0.254		0.239		0.192
Q89		0.042		0.124		0.148	-0.050		0.257		0.235		0.295		0.263		0.306		0.308		0.243		0.305		0.231
Q90		0.188		0.220		0.172	-0.004		0.215		0.165		0.185		0.235		0.294		0.233		0.180		0.249		0.158
Q91		0.067		0.228		0.173	-0.032		0.252		0.231		0.289		0.315		0.294		0.286		0.187		0.228		0.193
Q92		0.106		0.239		0.219	-0.057		0.205		0.193		0.245		0.224		0.234		0.238		0.187		0.228		0.193
Q93		0.219		0.258		0.212	-0.039		0.254		0.228		0.233		0.268		0.252		0.198		0.185		0.235		0.131
Q94		0.061		0.121		0.073	-0.055		0.392		0.068		0.143		0.118		0.153		0.106		0.047		0.143		0.083
Q95		0.080		0.135		0.080	-0.087		0.171		0.226		0.123		0.119		0.128		0.114		0.088		0.088		0.068
Q96		0.081		0.233		0.209	-0.107		0.276		0.298		0.275		0.277		0.337		0.292		0.243		0.255		0.174
Q97		0.171		0.218		0.195	-0.059		0.245		0.224		0.240		0.247		0.279		0.272		0.228		0.236		0.150
Q98		0.222		0.193		0.193	-0.042		0.269		0.243		0.249		0.250		0.302		0.384		0.219		0.249		0.156
Q99		0.168		0.183		0.169	-0.042		0.211		0.212		0.224		0.201		0.247		0.345		0.188		0.218		0.153

	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27
Q14	1.000													
Q15	0.483	1.000												
Q16	0.400	-0.006	1.000											
Q17	0.437	0.437	0.024	1.000										
Q18	0.221	0.060	0.394	-0.012	1.000									
Q19	0.180	0.180	0.140	0.105	0.221	1.000								
Q20	0.134	0.067	0.111	0.015	0.111	0.221	1.000							
Q21	0.169	0.151	0.167	0.088	0.152	0.221	0.431	1.000						
Q22	0.038	0.107	0.068	0.045	0.116	0.221	0.295	0.438	1.000					
Q23	0.088	0.115	0.054	0.034	0.096	0.221	0.371	0.224	0.188	1.000				
Q24	0.131	0.183	0.143	0.078	0.223	0.221	0.286	0.349	0.221	0.560	1.000			
Q25	0.140	0.093	0.140	0.020	0.212	0.212	0.362	0.228	0.349	0.294	0.279	1.000		
Q26	0.056	0.079	0.063	0.042	0.145	0.322	0.345	0.209	0.320	0.294	0.249	0.748	1.000	
Q27	0.033	0.054	0.117	-0.051	0.151	0.256	0.197	0.222	0.384	0.230	0.291	0.587	0.831	1.000
Q28	0.031	0.095	0.101	0.124	0.159	0.273	0.165	0.172	0.269	0.303	0.265	0.495	0.506	0.502
Q29	0.046	0.108	0.113	0.070	0.156	0.324	0.226	0.229	0.172	0.335	0.186	0.325	0.236	0.221
Q30	0.087	0.134	0.134	0.070	0.156	0.295	0.229	0.185	0.217	0.230	0.261	0.274	0.219	0.207
Q31	0.147	0.121	0.106	0.160	0.136	0.119	0.095	0.249	0.185	0.230	0.261	0.274	0.219	0.207
Q32	0.093	0.087	0.088	0.129	0.093	0.089	0.018	0.122	0.059	0.057	0.025	0.135	0.175	0.117
Q33	0.067	0.102	0.136	0.092	0.168	0.224	0.231	0.206	0.206	0.299	0.230	0.225	0.234	0.281
Q34	0.002	0.082	0.037	0.083	0.053	0.198	0.171	0.075	0.075	0.189	0.170	0.105	0.102	0.110
Q35	0.059	0.156	0.049	0.184	0.072	0.203	0.216	0.194	0.194	0.269	0.282	0.169	0.143	0.199
Q36	0.028	0.153	0.049	0.138	0.080	0.147	0.167	0.167	0.376	0.238	0.189	0.089	0.078	0.126
Q37	0.033	0.070	0.026	0.051	0.118	0.073	0.110	0.117	0.117	0.187	0.185	0.106	0.053	0.125
Q38	0.115	0.061	0.171	0.049	0.165	0.152	0.070	0.156	0.156	0.024	0.029	0.248	0.260	0.157
Q39	0.130	0.145	0.152	0.089	0.152	0.251	0.267	0.267	0.267	0.024	0.276	0.279	0.260	0.308
Q40	0.157	0.058	0.172	0.043	0.143	0.125	0.094	0.094	0.138	0.041	0.077	0.243	0.274	0.127
Q41	0.148	0.158	0.109	0.127	0.168	0.216	0.243	0.284	0.284	0.284	0.284	0.351	0.222	0.311
Q42	0.080	0.144	0.365	0.086	0.119	0.219	0.297	0.297	0.166	0.316	0.274	0.217	0.166	0.211
Q43	0.042	0.127	0.097	0.075	0.173	0.144	0.157	0.126	0.126	0.225	0.205	0.217	0.246	0.250
Q44	0.081	0.134	0.101	0.086	0.103	0.098	0.215	0.071	0.071	0.225	0.223	0.195	0.147	0.181
Q45	0.089	0.183	0.107	0.153	0.136	0.272	0.268	0.161	0.161	0.314	0.336	0.288	0.277	0.265
Q46	0.087	0.175	0.086	0.135	0.190	0.241	0.307	0.199	0.199	0.366	0.394	0.343	0.312	0.366
Q47	0.041	0.080	0.129	0.052	0.145	0.207	0.240	0.207	0.207	0.362	0.339	0.273	0.267	0.296
Q48	0.053	0.158	0.076	0.158	0.107	0.272	0.213	0.203	0.203	0.362	0.339	0.229	0.267	0.296
Q49	0.072	0.111	-0.082	-0.012	0.204	0.127	0.199	0.120	0.120	0.191	0.231	0.229	0.180	0.245
Q50	0.056	0.107	0.098	0.112	0.138	0.134	0.315	0.199	0.199	0.191	0.157	0.086	0.110	0.134
Q51	0.137	0.165	0.120	0.130	0.137	0.348	0.315	0.244	0.244	0.322	0.296	0.275	0.244	0.294
Q52	0.053	0.194	0.080	0.202	0.198	0.316	0.262	0.304	0.304	0.232	0.267	0.270	0.265	0.267
Q53	0.014	0.053	0.020	0.091	0.032	0.090	0.262	0.262	0.262	0.222	0.202	0.264	0.261	0.275
Q54	0.219	0.102	0.147	0.025	0.111	0.059	0.079	0.151	0.151	0.005	0.035	0.187	0.194	0.358
Q55	0.028	0.106	0.046	0.098	0.075	0.151	0.155	0.145	0.145	0.005	0.035	0.187	0.194	0.358
Q56	0.291	0.122	0.212	0.065	0.121	0.118	0.088	0.190	0.190	0.224	0.241	0.178	0.167	0.155
Q57	0.122	0.177	0.117	0.160	0.210	0.233	0.181	0.156	0.156	0.025	0.094	0.236	0.227	0.182
Q58	0.087	0.097	0.369	0.093	0.858	0.155	0.170	0.156	0.156	0.226	0.249	0.229	0.281	0.209
Q59	0.014	0.115	0.034	0.134	0.114	0.204	0.232	0.121	0.121	0.301	0.265	0.183	0.188	0.188
Q60	0.009	0.114	0.054	0.134	0.121	0.208	0.201	0.109	0.109	0.276	0.310	0.170	0.153	0.205
Q61	0.083	0.096	0.056	0.020	0.127	0.195	0.216	0.121	0.121	0.276	0.310	0.170	0.153	0.205
Q62	0.022	0.110	0.039	0.054	0.121	0.195	0.216	0.121	0.121	0.276	0.310	0.170	0.153	0.205
Q63	0.077	0.069	0.039	0.001	0.119	0.213	0.219	0.170	0.170	0.235	0.220	0.168	0.162	0.114

	Q14	Q15	Q16	Q17	Q18	Q19	Q20	Q21	Q22	Q23	Q24	Q25	Q26	Q27
Q64														
Q65	65	0.077	0.067	0.073	0.018	0.164	0.130	0.157	0.163	0.150	0.201	0.133	0.170	0.120
Q66	66	0.014	0.123	0.039	0.073	0.079	0.129	0.150	0.165	0.158	0.214	0.137	0.171	0.110
Q67	67	0.120	0.126	0.039	0.073	0.103	0.139	0.129	0.075	0.118	0.081	0.094	0.109	0.095
Q68	68	0.092	0.107	0.120	0.074	0.133	0.216	0.226	0.147	0.269	0.177	0.200	0.225	0.158
Q69	69	0.076	0.120	0.084	0.095	0.152	0.263	0.225	0.182	0.243	0.219	0.219	0.257	0.230
Q70	70	0.119	0.081	0.067	0.114	0.129	0.185	0.159	0.143	0.149	0.123	0.116	0.125	0.088
Q71	71	0.075	0.149	0.024	0.146	0.106	0.249	0.225	0.178	0.222	0.123	0.112	0.149	0.154
Q72	72	0.167	0.198	0.098	0.150	0.152	0.275	0.272	0.234	0.274	0.104	0.122	0.254	0.193
Q73	73	0.023	0.052	0.000	0.070	0.083	0.144	0.158	0.064	0.182	0.120	0.117	0.391	0.073
Q74	74	0.044	0.147	0.100	0.151	0.090	0.231	0.238	0.221	0.296	0.278	0.223	0.175	0.235
Q75	75	0.093	0.206	0.098	0.123	0.126	0.301	0.333	0.302	0.351	0.308	0.278	0.272	0.295
Q76	76	0.101	0.194	0.133	0.158	0.182	0.319	0.236	0.278	0.290	0.242	0.278	0.274	0.283
Q77	77	0.134	0.245	0.110	0.154	0.120	0.303	0.334	0.251	0.363	0.352	0.252	0.233	0.233
Q78	78	0.088	0.211	0.091	0.200	0.125	0.246	0.215	0.244	0.229	0.226	0.215	0.210	0.169
Q79	79	0.068	0.150	0.127	0.088	0.150	0.242	0.369	0.134	0.353	0.283	0.230	0.211	0.193
Q80	80	0.143	0.214	0.153	0.184	0.223	0.282	0.320	0.208	0.268	0.271	0.228	0.218	0.172
Q81	81	0.123	0.191	0.186	0.138	0.110	0.266	0.306	0.225	0.291	0.114	0.252	0.254	0.241
Q82	82	0.106	0.185	0.110	0.190	0.201	0.289	0.249	0.249	0.265	0.239	0.243	0.263	0.248
Q83	83	0.138	0.117	0.158	0.061	0.202	0.258	0.333	0.210	0.296	0.222	0.339	0.330	0.301
Q84	84	0.129	0.112	0.137	0.067	0.156	0.231	0.362	0.199	0.342	0.340	0.253	0.244	0.214
Q85	85	0.149	0.161	0.139	0.114	0.206	0.339	0.362	0.278	0.355	0.351	0.310	0.338	0.280
Q86	86	0.113	0.200	0.114	0.197	0.130	0.239	0.237	0.225	0.242	0.239	0.235	0.252	0.254
Q87	87	0.103	0.075	0.112	0.080	0.100	0.236	0.219	0.199	0.230	0.220	0.207	0.234	0.227
Q88	88	0.113	0.099	0.118	0.120	0.111	0.162	0.114	0.180	0.103	0.391	0.221	0.244	0.183
Q89	89	0.094	0.073	0.163	0.071	0.187	0.263	0.307	0.257	0.286	0.310	0.355	0.288	0.319
Q90	90	0.091	0.133	0.093	0.126	0.175	0.283	0.260	0.239	0.268	0.289	0.306	0.328	0.308
Q91	91	0.129	0.169	0.044	0.103	0.120	0.166	0.230	0.190	0.139	0.174	0.268	0.296	0.222
Q92	92	0.082	0.161	0.085	0.087	0.148	0.273	0.334	0.270	0.322	0.308	0.342	0.356	0.369
Q93	93	0.117	0.073	0.167	0.093	0.211	0.159	0.224	0.211	0.193	0.250	0.376	0.401	0.327
Q94	94	0.136	0.058	0.201	0.078	0.264	0.252	0.292	0.256	0.196	0.248	0.433	0.486	0.372
Q95	95	0.057	0.033	0.104	0.039	0.071	0.105	0.168	0.117	0.111	0.065	0.191	0.144	0.175
Q96	96	0.145	0.073	0.240	0.115	0.115	0.105	0.190	0.141	0.133	0.175	0.220	0.226	0.195
Q97	97	0.127	0.080	0.177	0.056	0.138	0.271	0.304	0.268	0.230	0.292	0.366	0.383	0.318
Q98	98	0.146	0.143	0.233	0.152	0.221	0.231	0.233	0.239	0.167	0.198	0.360	0.375	0.334
Q99	99	0.150	0.107	0.239	0.132	0.273	0.228	0.276	0.236	0.200	0.195	0.377	0.396	0.330
Q99	100	0.122	0.083	0.205	0.094	0.198	0.253	0.294	0.227	0.193	0.131	0.331	0.316	0.294

	27	28	29	30	31	32	33	34	35	36	37	38	39	40
Q27	1.000													
Q28	0.135	1.000												
Q29	0.275	0.577	1.000											
Q30	0.180	0.468	0.474	1.000										
Q31	0.119	0.106	0.131	0.157	1.000									
Q32	0.116	-0.043	0.136	-0.111	0.456	1.000								
Q33	0.193	0.461	0.423	0.431	0.179	0.311	1.000							
Q34	0.089	0.356	0.295	0.395	0.118	0.367	0.248	1.000						
Q35	0.168	0.310	0.246	0.240	0.116	0.125	0.212	0.025	1.000					
Q36	0.128	0.180	0.182	0.195	0.206	0.123	-0.025	0.025	0.319	1.000				
Q37	0.099	0.008	0.050	0.007	0.051	0.153	0.064	0.353	0.183	0.443	1.000			
Q38	0.086	0.008	0.008	0.008	0.008	0.153	0.064	0.353	0.183	0.443	0.495	1.000		
Q39	0.228	0.353	0.363	0.303	0.309	0.030	0.114	0.018	-0.005	-0.051	-0.192	-0.314	1.000	
Q40	0.086	0.012	0.000	0.000	0.000	0.114	0.018	0.018	-0.005	-0.051	-0.192	-0.314	0.652	1.000
Q41	0.086	0.012	0.000	0.000	0.000	0.114	0.018	0.018	-0.005	-0.051	-0.192	-0.314	0.652	0.964
Q42	0.252	0.273	0.367	0.250	0.197	0.197	0.113	0.337	0.125	0.310	0.234	0.291	0.327	0.510
Q43	0.087	0.262	0.298	0.291	0.152	-0.021	0.021	0.303	0.202	0.319	0.331	0.282	-0.076	0.408
Q44	0.158	0.321	0.365	0.349	0.189	0.018	0.018	0.528	0.105	0.264	0.176	0.175	0.049	0.310
Q45	0.111	0.259	0.254	0.234	0.160	0.062	0.062	0.242	0.126	0.365	0.298	0.307	-0.101	0.358
Q46	0.196	0.326	0.399	0.352	0.122	0.099	0.099	0.376	0.255	0.399	0.331	0.273	-0.054	0.463
Q47	0.289	0.335	0.430	0.331	0.166	0.122	0.099	0.320	0.195	0.408	0.365	0.372	-0.054	0.516
Q48	0.301	0.309	0.421	0.236	0.179	0.121	0.029	0.242	0.123	0.366	0.254	0.191	0.144	0.346
Q49	0.154	0.285	0.299	0.243	0.121	0.029	0.029	0.314	0.162	0.316	0.211	0.195	-0.020	0.290
Q50	0.076	0.082	0.151	0.092	0.115	0.029	0.029	0.113	0.073	0.113	0.072	0.047	-0.014	0.098
Q51	0.250	0.295	0.341	0.297	0.155	0.002	0.002	0.332	0.227	0.259	0.178	0.144	0.130	0.297
Q52	0.183	0.292	0.311	0.229	0.163	0.088	0.088	0.284	0.165	0.251	0.096	0.141	0.106	0.310
Q53	0.195	0.290	0.304	0.274	0.143	0.102	0.102	0.304	0.190	0.224	0.135	0.173	0.155	0.243
Q54	0.077	0.307	0.245	0.296	0.064	0.008	0.008	0.291	0.236	0.272	0.267	0.281	-0.013	0.297
Q55	0.112	-0.055	0.056	0.056	0.057	0.191	0.191	0.031	-0.194	-0.019	-0.030	-0.061	-0.082	-0.015
Q56	0.120	0.328	0.312	0.291	0.033	0.030	0.030	0.322	0.254	0.294	0.219	0.215	-0.014	0.352
Q57	0.121	-0.029	0.090	0.020	0.113	0.187	0.187	0.032	-0.134	0.019	-0.077	0.003	0.243	0.072
Q58	0.150	0.206	0.262	0.262	0.219	0.056	0.078	0.193	0.137	0.205	0.163	0.094	0.161	0.299
Q59	0.181	0.199	0.194	0.194	0.122	0.053	0.040	0.164	0.161	0.205	0.162	0.165	0.130	0.264
Q60	0.157	0.259	0.247	0.247	0.131	0.039	-0.015	0.146	0.141	0.208	0.234	0.141	0.092	0.273
Q61	0.154	0.247	0.248	0.248	0.192	0.011	0.010	0.161	0.232	0.276	0.195	0.155	0.031	0.309
Q62	0.162	0.096	0.147	0.147	0.105	-0.016	0.007	0.129	0.124	0.150	0.033	0.055	0.102	0.117
Q63	0.115	0.123	0.167	0.167	0.154	-0.015	0.008	0.206	0.177	0.190	0.077	0.031	0.103	0.185
Q64	0.196	0.178	0.137	0.137	0.153	0.047	0.076	0.149	0.145	0.187	0.088	0.130	0.045	0.246
Q65	0.124	0.066	0.104	0.104	0.131	0.067	0.051	0.176	0.119	0.105	0.036	0.175	0.127	0.246
Q66	0.098	0.069	0.121	0.121	0.161	0.067	0.041	0.221	0.172	0.148	0.079	0.033	0.152	0.160
Q67	0.117	0.411	0.337	0.337	0.314	0.046	-0.012	0.201	0.194	0.090	0.078	0.108	0.079	0.126
Q68	0.115	0.324	0.324	0.324	0.244	0.131	0.042	0.367	0.242	0.220	0.135	0.108	0.377	0.223
Q69	0.088	0.217	0.190	0.190	0.188	0.131	0.042	0.277	0.220	0.208	0.203	0.142	0.112	0.262
Q70	0.085	0.281	0.246	0.246	0.212	0.051	-0.001	0.251	0.150	0.166	0.095	0.083	0.142	0.115
Q71	0.181	0.280	0.299	0.299	0.171	0.030	0.030	0.225	0.187	0.304	0.185	0.099	0.112	0.291
Q72	0.087	0.236	0.199	0.199	0.207	0.036	-0.054	0.274	0.169	0.303	0.179	0.054	0.181	0.296
Q73	0.188	0.326	0.379	0.379	0.312	0.192	0.076	0.307	0.201	0.143	0.121	0.107	0.310	0.191
Q74	0.263	0.333	0.401	0.401	0.289	0.124	0.043	0.274	0.178	0.335	0.196	0.250	-0.027	0.476
Q75	0.166	0.327	0.331	0.331	0.105	0.113	0.014	0.294	0.172	0.194	0.126	0.144	0.127	0.351
Q76	0.214	0.311	0.361	0.361	0.100	0.042	-0.030	0.295	0.242	0.247	0.213	0.191	0.360	0.391



	Q40	Q41	Q42	Q43	Q44	Q45	Q46	Q47	Q48	Q49	Q50	Q51	Q52	Q53
Q40	1.000													
Q41	0.117	1.000												
Q42	0.099	0.366	1.000											
Q43	0.053	0.335	0.310	1.000										
Q44	0.051	0.279	0.339	0.214	1.000									
Q45	0.114	0.410	0.340	0.301	0.504	1.000								
Q46	0.000	0.464	0.447	0.356	0.571	0.571	1.000							
Q47	0.122	0.341	0.292	0.273	0.334	0.420	0.464	1.000						
Q48	0.045	0.338	0.325	0.262	0.264	0.382	0.455	0.158	1.000					
Q49	0.029	0.123	0.097	0.071	0.390	0.145	0.129	0.196	0.440	1.000				
Q50	0.210	0.295	0.284	0.241	0.215	0.363	0.348	0.391	0.336	0.176	1.000			
Q51	0.168	0.345	0.214	0.171	0.215	0.356	0.309	0.278	0.279	0.172	0.348	1.000		
Q52	0.133	0.259	0.190	0.189	0.153	0.302	0.274	0.274	0.262	0.104	0.190	0.153	1.000	
Q53	0.104	0.199	0.305	0.281	0.352	0.301	0.354	0.262	0.279	0.072	0.348	0.535	0.535	1.000
Q54	0.317	0.117	0.060	0.052	0.107	0.007	0.008	0.003	0.014	0.316	0.058	0.188	0.174	0.109
Q55	0.020	0.343	0.321	0.312	0.381	0.382	0.406	0.403	0.320	0.119	0.265	0.255	0.240	0.110
Q56	0.286	0.720	0.089	0.063	0.056	0.087	0.033	0.033	0.034	0.063	0.050	0.166	0.166	0.110
Q57	0.165	0.277	0.199	0.124	0.197	0.318	0.282	0.274	0.289	0.228	0.319	0.293	0.228	0.178
Q58	0.073	0.230	0.182	0.152	0.169	0.272	0.274	0.302	0.302	0.208	0.208	0.193	0.196	0.196
Q59	0.045	0.209	0.227	0.153	0.221	0.301	0.319	0.345	0.345	0.238	0.140	0.289	0.214	0.212
Q60	0.079	0.248	0.263	0.177	0.265	0.333	0.353	0.321	0.321	0.255	0.091	0.315	0.262	0.223
Q61	0.105	0.163	0.064	0.086	0.166	0.195	0.228	0.183	0.180	0.137	0.096	0.230	0.243	0.245
Q62	0.131	0.198	0.153	0.206	0.174	0.276	0.231	0.190	0.190	0.202	0.077	0.218	0.279	0.219
Q63	0.067	0.282	0.163	0.148	0.176	0.230	0.292	0.263	0.263	0.202	0.095	0.235	0.196	0.219
Q64	0.222	0.182	0.031	0.091	0.105	0.201	0.163	0.148	0.148	0.085	0.099	0.199	0.239	0.264
Q65	0.165	0.195	0.102	0.156	0.130	0.232	0.181	0.137	0.137	0.034	0.099	0.199	0.239	0.264
Q66	0.071	0.107	0.125	0.135	0.107	0.209	0.165	0.121	0.121	0.191	0.134	0.187	0.174	0.223
Q67	0.096	0.235	0.202	0.269	0.214	0.314	0.299	0.275	0.275	0.278	0.155	0.247	0.294	0.316
Q68	0.120	0.272	0.178	0.208	0.221	0.359	0.313	0.291	0.291	0.302	0.208	0.346	0.381	0.366
Q69	0.148	0.117	0.062	0.117	0.078	0.230	0.292	0.263	0.263	0.202	0.095	0.235	0.196	0.219
Q70	0.105	0.256	0.204	0.200	0.213	0.293	0.219	0.271	0.271	0.252	0.190	0.299	0.370	0.316
Q71	0.105	0.302	0.230	0.218	0.232	0.363	0.271	0.271	0.271	0.252	0.190	0.299	0.370	0.316
Q72	0.111	0.186	0.249	0.220	0.243	0.363	0.271	0.271	0.271	0.252	0.190	0.299	0.370	0.316
Q73	0.011	0.395	0.333	0.258	0.348	0.399	0.439	0.351	0.351	0.202	0.148	0.163	0.113	0.191
Q74	0.031	0.392	0.333	0.258	0.348	0.399	0.439	0.351	0.351	0.202	0.148	0.163	0.113	0.191
Q75	0.171	0.392	0.333	0.258	0.348	0.399	0.439	0.351	0.351	0.202	0.148	0.163	0.113	0.191
Q76	0.186	0.392	0.333	0.258	0.348	0.399	0.439	0.351	0.351	0.202	0.148	0.163	0.113	0.191
Q77	0.123	0.430	0.232	0.183	0.133	0.392	0.343	0.343	0.343	0.356	0.291	0.436	0.584	0.408
Q78	0.103	0.330	0.227	0.191	0.140	0.392	0.343	0.343	0.343	0.356	0.291	0.436	0.584	0.408
Q79	0.100	0.231	0.294	0.202	0.174	0.389	0.408	0.408	0.408	0.311	0.315	0.358	0.418	0.359
Q80	0.160	0.297	0.265	0.218	0.193	0.330	0.332	0.332	0.332	0.223	0.223	0.261	0.366	0.366
Q81	0.199	0.396	0.248	0.202	0.183	0.383	0.334	0.334	0.334	0.249	0.166	0.351	0.298	0.345
Q82	0.136	0.373	0.221	0.205	0.209	0.409	0.381	0.381	0.381	0.292	0.192	0.375	0.397	0.391
Q83	0.119	0.358	0.178	0.205	0.209	0.409	0.381	0.381	0.381	0.292	0.192	0.375	0.397	0.391
Q84	0.075	0.356	0.378	0.350	0.267	0.380	0.441	0.441	0.441	0.330	0.122	0.391	0.545	0.341
Q85	0.155	0.356	0.420	0.373	0.267	0.380	0.441	0.441	0.441	0.330	0.122	0.391	0.545	0.341
Q86	0.170	0.363	0.372	0.312	0.304	0.402	0.407	0.407	0.407	0.305	0.149	0.314	0.350	0.300
Q87	0.080	0.332	0.271	0.234	0.265	0.383	0.485	0.485	0.485	0.413	0.155	0.379	0.350	0.300
Q88	0.254	0.332	0.235	0.226	0.265	0.328	0.372	0.372	0.372	0.349	0.246	0.405	0.454	0.423
Q89	0.127	0.246	0.074	0.115	0.134	0.179	0.136	0.136	0.136	0.306	0.139	0.373	0.379	0.353
Q90	0.176	0.332	0.155	0.199	0.210	0.301	0.357	0.357	0.357	0.172	0.007	0.157	0.181	0.159
Q91	0.176	0.332	0.155	0.199	0.210	0.301	0.357	0.357	0.357	0.172	0.007	0.157	0.181	0.159
Q92	0.176	0.332	0.155	0.199	0.210	0.301	0.357	0.357	0.357	0.172	0.007	0.157	0.181	0.159
Q93	0.176	0.332	0.155	0.199	0.210	0.301	0.357	0.357	0.357	0.172	0.007	0.157	0.181	0.159
Q94	0.176	0.332	0.155	0.199	0.210	0.301	0.357	0.357	0.357	0.172	0.007	0.157	0.181	0.159
Q95	0.176	0.332	0.155	0.199	0.210	0.301	0.357	0.357	0.357	0.172	0.007	0.157	0.181	0.159
Q96	0.176	0.332	0.155	0.199	0.210	0.301	0.357	0.357	0.357	0.172	0.007	0.157	0.181	0.159
Q97	0.176	0.332	0.155	0.199	0.210	0.301	0.357	0.357	0.357	0.172	0.007	0.157	0.181	0.159
Q98	0.176	0.332	0.155	0.199	0.210	0.301	0.357	0.357	0.357	0.172	0.007	0.157	0.181	0.159
Q99	0.176	0.332	0.155	0.199	0.210	0.301	0.357	0.357	0.357	0.172	0.007	0.157	0.181	0.159

	Q40	Q41	Q42	Q43	Q44	Q45	Q46	Q47	Q48	Q49	Q50	Q51	Q52	Q53
Q90														
Q91	0.273	0.301	0.121	0.202	0.117	0.306	0.199	0.153	0.234	0.087	0.240	0.285	0.273	
Q92	0.136	0.359	0.200	0.308	0.235	0.350	0.384	0.277	0.336	0.190	0.344	0.378	0.332	
Q93	0.225	0.277	0.156	0.226	0.253	0.328	0.361	0.243	0.271	0.138	0.302	0.334	0.281	
Q94	0.230	0.303	0.173	0.268	0.146	0.278	0.334	0.261	0.209	0.152	0.270	0.312	0.294	
Q95	0.074	0.138	0.070	0.198	0.079	0.118	0.155	0.194	0.165	0.075	0.238	0.121	0.087	
Q96	0.080	0.147	0.125	0.171	0.091	0.138	0.177	0.162	0.184	0.033	0.194	0.139	0.126	
Q97	0.165	0.282	0.217	0.218	0.167	0.295	0.301	0.283	0.242	0.168	0.342	0.343	0.312	
Q98	0.200	0.289	0.174	0.228	0.097	0.219	0.271	0.234	0.211	0.102	0.302	0.256	0.252	
Q99	0.229	0.283	0.158	0.187	0.117	0.251	0.260	0.270	0.219	0.116	0.326	0.288	0.259	
100	0.221	0.237	0.176	0.177	0.111	0.230	0.213	0.223	0.174	0.187	0.317	0.278	0.267	





	Q66	Q67	Q68	Q69	Q70	Q71	Q72	Q73	Q74	Q75	Q76	Q77	Q78	Q79
Q66	67	1.000												
Q67	68	0.261	1.000											
Q68	69	0.218	0.603	1.000										
Q69	70	0.202	0.378	0.433	1.000									
Q70	71	0.221	0.306	0.330	0.295	1.000								
Q71	72	0.242	0.324	0.333	0.292	0.622	1.000							
Q72	73	0.123	0.284	0.230	0.114	0.253	0.249	1.000						
Q73	74	0.162	0.298	0.343	0.169	0.368	0.367	0.209	1.000					
Q74	75	0.178	0.335	0.419	0.252	0.376	0.483	0.164	0.451	1.000				
Q75	76	0.235	0.350	0.360	0.285	0.315	0.337	0.156	0.338	0.565	1.000			
Q76	77	0.212	0.308	0.396	0.260	0.391	0.470	0.195	0.436	0.654	0.477	1.000		
Q77	78	0.221	0.302	0.359	0.256	0.235	0.236	0.189	0.305	0.387	0.585	0.449	1.000	
Q78	79	0.129	0.279	0.306	0.181	0.251	0.284	0.189	0.306	0.382	0.344	0.366	0.256	1.000
Q79	80	0.182	0.363	0.350	0.272	0.334	0.401	0.181	0.357	0.465	0.478	0.410	0.474	0.474
Q80	81	0.188	0.337	0.387	0.266	0.382	0.490	0.177	0.359	0.608	0.413	0.498	0.387	0.352
Q81	82	0.285	0.346	0.387	0.307	0.268	0.308	0.214	0.346	0.413	0.643	0.416	0.681	0.268
Q82	83	0.211	0.312	0.316	0.172	0.284	0.327	0.212	0.371	0.410	0.360	0.383	0.298	0.388
Q83	84	0.174	0.352	0.333	0.165	0.363	0.373	0.289	0.397	0.336	0.328	0.397	0.309	0.379
Q84	85	0.248	0.421	0.437	0.295	0.439	0.475	0.276	0.491	0.436	0.448	0.535	0.443	0.433
Q85	86	0.246	0.338	0.397	0.288	0.366	0.392	0.229	0.366	0.392	0.348	0.441	0.344	0.292
Q86	87	0.187	0.291	0.291	0.163	0.279	0.316	0.192	0.355	0.392	0.311	0.391	0.295	0.246
Q87	88	0.150	0.129	0.152	0.164	0.176	0.278	0.164	0.166	0.196	0.152	0.220	0.132	0.134
Q88	89	0.154	0.297	0.290	0.153	0.210	0.340	0.109	0.268	0.394	0.375	0.339	0.252	0.324
Q89	90	0.159	0.289	0.306	0.170	0.319	0.372	0.111	0.249	0.422	0.371	0.383	0.275	0.275
Q90	91	0.229	0.215	0.245	0.251	0.203	0.275	0.092	0.241	0.346	0.353	0.339	0.287	0.228
Q91	92	0.250	0.298	0.307	0.247	0.264	0.331	0.183	0.339	0.394	0.383	0.424	0.312	0.309
Q92	93	0.139	0.240	0.316	0.289	0.234	0.336	0.193	0.271	0.297	0.276	0.320	0.234	0.251
Q93	94	0.141	0.234	0.262	0.240	0.170	0.261	0.107	0.262	0.316	0.303	0.276	0.248	0.303
Q94	95	0.123	0.150	0.175	0.126	0.140	0.150	0.079	0.141	0.210	0.212	0.177	0.106	0.163
Q95	96	0.086	0.162	0.123	0.120	0.103	0.115	0.019	0.167	0.164	0.192	0.139	0.119	0.174
Q96	97	0.158	0.301	0.325	0.229	0.235	0.299	0.125	0.297	0.373	0.327	0.375	0.232	0.332
Q97	98	0.060	0.206	0.229	0.186	0.175	0.236	0.081	0.200	0.287	0.290	0.221	0.197	0.273
Q98	99	0.100	0.248	0.256	0.201	0.215	0.281	0.085	0.225	0.332	0.320	0.236	0.215	0.294
Q99	100	0.117	0.212	0.231	0.206	0.238	0.264	0.108	0.219	0.290	0.263	0.243	0.154	0.241

	Q79	80	81	82	83	84	85	86	87	88	89	90	91	92
Q79	80	1.000												
Q80	81	0.438	1.000											
Q81	82	0.408	0.459	1.000										
Q82	83	0.408	0.398	0.336	1.000									
Q83	84	0.427	0.414	0.319	0.725	1.000								
Q84	85	0.515	0.513	0.477	0.582	0.605	1.000							
Q85	86	0.392	0.458	0.395	0.389	0.460	0.639	1.000						
Q86	87	0.296	0.391	0.293	0.409	0.421	0.474	0.486	1.000					
Q87	88	0.153	0.257	0.194	0.134	0.058	0.238	0.209	0.275	1.000				
Q88	89	0.317	0.346	0.279	0.407	0.423	0.377	0.275	0.352	0.315	1.000			
Q89	90	0.324	0.393	0.297	0.338	0.349	0.421	0.356	0.310	0.319	0.462	1.000		
Q90	91	0.321	0.324	0.301	0.261	0.238	0.318	0.286	0.247	0.332	0.379	0.387	1.000	
Q91	92	0.310	0.310	0.381	0.429	0.391	0.467	0.374	0.349	0.261	0.492	0.405	0.465	1.000
Q92	93	0.310	0.324	0.262	0.341	0.283	0.396	0.348	0.278	0.330	0.402	0.334	0.384	0.491
Q93	94	0.326	0.316	0.304	0.429	0.304	0.396	0.278	0.318	0.280	0.422	0.346	0.380	0.499
Q94	95	0.175	0.185	0.157	0.233	0.242	0.186	0.147	0.204	0.091	0.257	0.194	0.133	0.246
Q95	96	0.146	0.190	0.185	0.231	0.240	0.209	0.145	0.163	0.096	0.305	0.190	0.190	0.241
Q96	97	0.358	0.374	0.287	0.403	0.369	0.454	0.314	0.282	0.216	0.436	0.366	0.327	0.440
Q97	98	0.296	0.270	0.257	0.381	0.265	0.327	0.266	0.246	0.158	0.373	0.304	0.278	0.373
Q98	99	0.344	0.296	0.243	0.375	0.281	0.347	0.264	0.268	0.197	0.414	0.334	0.337	0.396
Q99	100	0.276	0.259	0.241	0.375	0.310	0.359	0.255	0.211	0.167	0.386	0.331	0.289	0.389

	Q92	93	94	95	96	97	98	99	100
Q92	93	1.000							
Q93	94	0.628	1.000						
Q94	95	0.247	0.306	1.000					
Q95	96	0.239	0.395	0.204	1.000				
Q96	97	0.476	0.602	0.247	0.411	1.000			
Q97	98	0.437	0.620	0.218	0.406	0.625	1.000		
Q98	99	0.439	0.600	0.287	0.409	0.605	0.851	1.000	
Q99	100	0.401	0.535	0.235	0.375	0.545	0.652	0.674	1.000

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## **APPENDIX C**

**The Sorted Rotated Factor Loadings of the 99 Item  
"Soldier Opinion Questionnaire" (Varimax Rotation)**

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# The Sorted Rotated Factor Loadings of the 99 Item "Soldier Opinion Questionnaire" (Varimax Rotation)

SORTED ROTATED FACTOR LOADINGS (PATTERN)

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	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7	FACTOR 8	FACTOR 9	FACTOR 10
Q76	0.681	0.0	0.0	0.0	0.0	0.0	0.0	0.281	0.0	0.0
Q80	0.679	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q51	0.665	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q74	0.649	0.0	0.0	0.0	0.0	0.0	0.0	0.258	0.0	0.0
Q71	0.592	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q70	0.539	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q97	0.0	0.851	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q98	0.0	0.826	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q99	0.0	0.784	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q96	0.0	0.687	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q93	0.0	0.679	0.0	0.0	0.261	0.0	0.0	0.0	0.0	0.0
Q95	0.0	0.529	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q10	0.0	0.0	0.735	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q9	0.0	0.0	0.709	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q7	0.0	0.0	0.617	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q8	0.0	0.0	0.608	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q12	0.0	0.0	0.606	0.0	0.0	0.0	0.0	0.268	0.0	0.0
Q11	0.0	0.0	0.543	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q19	0.0	0.0	0.526	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q33	0.0	0.0	0.0	0.660	0.0	0.0	0.0	0.0	0.0	0.0
Q28	0.0	0.0	0.0	0.828	0.0	0.0	0.0	0.0	0.0	0.0
Q43	0.0	0.0	0.0	0.0	0.336	0.0	0.0	0.0	0.0	0.0
Q30	0.0	0.0	0.310	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q34	0.0	0.0	0.0	0.610	0.0	0.0	0.0	0.0	0.0	0.0
Q29	0.0	0.0	0.0	0.607	0.0	0.0	0.0	0.0	0.0	0.0
Q26	0.0	0.0	0.0	0.593	0.0	0.0	0.0	0.0	0.0	0.0
Q25	0.0	0.0	0.0	0.0	0.744	0.0	0.0	0.0	0.0	0.0
Q24	0.0	0.259	0.0	0.0	0.739	0.0	0.0	0.0	0.0	0.0
Q27	0.0	0.0	0.0	0.0	0.714	0.0	0.0	0.0	0.0	0.0
Q35	0.0	0.0	0.0	0.0	0.670	0.0	0.0	0.0	0.0	0.0
Q36	0.0	0.0	0.0	0.0	0.0	0.724	0.0	0.0	0.0	0.0
Q62	0.0	0.0	0.0	0.0	0.0	0.724	0.0	0.0	0.0	0.0
Q65	0.0	0.0	0.0	0.0	0.0	0.0	0.763	0.0	0.0	0.0
Q64	0.0	0.0	0.0	0.0	0.0	0.0	0.747	0.0	0.0	0.0
Q61	0.0	0.0	0.0	0.0	0.0	0.0	0.717	0.0	0.0	0.0
Q63	0.0	0.0	0.0	0.0	0.0	0.0	0.672	0.0	0.0	0.0
Q77	0.0	0.0	0.0	0.0	0.0	0.0	0.599	0.0	0.0	0.0
Q81	0.0	0.0	0.270	0.0	0.0	0.0	0.0	0.693	0.0	0.0
Q75	0.304	0.0	0.0	0.0	0.0	0.0	0.0	0.678	0.0	0.0
Q59	0.0	0.0	0.280	0.0	0.0	0.0	0.0	0.627	0.0	0.0
Q60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.716	0.0
Q58	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.726	0.0
Q22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.628	0.0
Q23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.655
Q20	0.0	0.0	0.251	0.0	0.0	0.0	0.0	0.0	0.0	0.607
Q54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.592
Q56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q53	0.0	0.0	0.0	0.259	0.0	0.0	0.0	0.0	0.0	0.0
Q90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Q39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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[illegible]







	FACTOR 21	FACTOR 22	FACTOR 23
076	0.0	0.0	0.0
080	0.0	0.0	0.0
081	0.0	0.0	0.0
082	0.0	0.0	0.0
083	0.0	0.0	0.0
084	0.0	0.0	0.0
085	0.0	0.0	0.0
086	0.0	0.0	0.0
087	0.0	0.0	0.0
088	0.0	0.0	0.0
089	0.0	0.0	0.0
090	0.0	0.0	0.0
091	0.0	0.0	0.0
092	0.0	0.0	0.0
093	0.0	0.0	0.0
094	0.0	0.0	0.0
095	0.0	0.0	0.0
096	0.0	0.0	0.0
097	0.0	0.0	0.0
098	0.0	0.0	0.0
099	0.0	0.0	0.0
100	0.0	0.0	0.0
101	0.0	0.0	0.0
102	0.0	0.0	0.0
103	0.0	0.0	0.0
104	0.0	0.0	0.0
105	0.0	0.0	0.0
106	0.0	0.0	0.0
107	0.0	0.0	0.0
108	0.0	0.0	0.0
109	0.0	0.0	0.0
110	0.0	0.0	0.0
111	0.0	0.0	0.0
112	0.0	0.0	0.0
113	0.0	0.0	0.0
114	0.0	0.0	0.0
115	0.0	0.0	0.0
116	0.0	0.0	0.0
117	0.0	0.0	0.0
118	0.0	0.0	0.0
119	0.0	0.0	0.0
120	0.0	0.0	0.0
121	0.0	0.0	0.0
122	0.0	0.0	0.0
123	0.0	0.0	0.0
124	0.0	0.0	0.0
125	0.0	0.0	0.0
126	0.0	0.0	0.0
127	0.0	0.0	0.0
128	0.0	0.0	0.0
129	0.0	0.0	0.0
130	0.0	0.0	0.0
131	0.0	0.0	0.0
132	0.0	0.0	0.0
133	0.0	0.0	0.0
134	0.0	0.0	0.0
135	0.0	0.0	0.0
136	0.0	0.0	0.0
137	0.0	0.0	0.0
138	0.0	0.0	0.0
139	0.0	0.0	0.0
140	0.0	0.0	0.0
141	0.0	0.0	0.0
142	0.0	0.0	0.0
143	0.0	0.0	0.0
144	0.0	0.0	0.0
145	0.0	0.0	0.0
146	0.0	0.0	0.0
147	0.0	0.0	0.0
148	0.0	0.0	0.0
149	0.0	0.0	0.0
150	0.0	0.0	0.0
151	0.0	0.0	0.0
152	0.0	0.0	0.0
153	0.0	0.0	0.0
154	0.0	0.0	0.0
155	0.0	0.0	0.0
156	0.0	0.0	0.0
157	0.0	0.0	0.0
158	0.0	0.0	0.0
159	0.0	0.0	0.0
160	0.0	0.0	0.0
161	0.0	0.0	0.0
162	0.0	0.0	0.0
163	0.0	0.0	0.0
164	0.0	0.0	0.0
165	0.0	0.0	0.0
166	0.0	0.0	0.0
167	0.0	0.0	0.0
168	0.0	0.0	0.0
169	0.0	0.0	0.0
170	0.0	0.0	0.0
171	0.0	0.0	0.0
172	0.0	0.0	0.0
173	0.0	0.0	0.0
174	0.0	0.0	0.0
175	0.0	0.0	0.0
176	0.0	0.0	0.0
177	0.0	0.0	0.0
178	0.0	0.0	0.0
179	0.0	0.0	0.0
180	0.0	0.0	0.0
181	0.0	0.0	0.0
182	0.0	0.0	0.0
183	0.0	0.0	0.0
184	0.0	0.0	0.0
185	0.0	0.0	0.0
186	0.0	0.0	0.0
187	0.0	0.0	0.0
188	0.0	0.0	0.0
189	0.0	0.0	0.0
190	0.0	0.0	0.0
191	0.0	0.0	0.0
192	0.0	0.0	0.0
193	0.0	0.0	0.0
194	0.0	0.0	0.0
195	0.0	0.0	0.0
196	0.0	0.0	0.0
197	0.0	0.0	0.0
198	0.0	0.0	0.0
199	0.0	0.0	0.0
200	0.0	0.0	0.0

	FACTOR 21	FACTOR 22	FACTOR 23
03	0.0	0.0	0.0
02	0.0	0.0	0.0
069	0.0	0.0	0.0
068	0.0	0.0	0.0
067	0.0	0.0	0.0
016	0.0	0.0	0.0
014	0.0	0.0	0.0
016	0.0	0.0	0.0
032	0.0	0.0	0.0
031	0.0	0.0	0.0
015	0.0	0.0	0.0
017	0.0	0.0	0.0
094	0.0	0.0	0.0
01	0.0	0.0	0.0
048	0.0	0.0	0.0
072	0.0	0.0	0.0
049	0.0	0.0	0.0
04	0.595	0.0	0.0
045	0.0	0.664	0.0
06	0.0	0.0	0.0
05	0.0	0.0	0.0
066	0.0	0.0	0.0
073	0.0	0.0	0.0
046	0.0	0.0	0.0
039	0.0	0.0	0.0
021	0.0	0.0	0.0
037	0.0	0.309	0.0
078	0.0	0.0	0.0
079	0.0	0.0	-0.296
052	0.0	0.0	0.0
050	0.0	0.0	-0.262
082	0.0	0.0	0.0
083	0.0	0.0	0.0
084	0.0	0.0	0.0
085	0.0	0.0	0.0
086	0.0	0.0	0.0
087	0.0	0.0	0.259
088	0.0	0.0	0.0
089	0.0	0.0	0.0
090	0.0	0.0	0.0
091	0.0	0.0	0.0
092	0.0	0.0	0.0
042	0.0	0.0	0.0
041	0.0	0.0	0.284
055	0.0	0.0	0.0
013	0.354	0.0	0.0
044	0.0	0.0	0.0
047	0.0	0.0	0.0
057	0.282	-0.319	0.0

THE ABOVE FACTOR LOADING MATRIX HAS BEEN REARRANGED SO THAT THE COLUMNS APPEAR IN DECREASING ORDER OF VARIANCE EXPLAINED BY FACTORS. THE ROWS HAVE BEEN REARRANGED SO THAT FOR EACH SUCCESSIVE FACTOR, LOADINGS GREATER THAN 0.5000 APPEAR FIRST. LOADINGS LESS THAN 0.2500 HAVE BEEN REPLACED BY ZERO.

## APPENDIX D

The Sorted Rotated Factor Loadings of the 99 Item  
"Soldier Opinion Questionnaire" (Quartimax Rotation)

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# The Sorted Rotated Factor Loadings of the 99 Item "Soldier Opinion Questionnaire" (Quartimax Rotation)\*

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## SORTED ROTATED FACTOR LOADINGS (PATTERN)

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7	FACTOR 8	FACTOR 9	FACTOR 10
084	0.768	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
074	0.758	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
076	0.755	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080	0.736	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
051	0.672	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
083	0.660	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
085	0.651	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
045	0.641	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
073	0.636	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
075	0.635	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
082	0.632	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
071	0.630	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
046	0.621	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
079	0.619	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
081	0.615	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
081	0.608	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
086	0.588	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
039	0.585	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
050	0.573	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
091	0.570	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
029	0.562	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
047	0.558	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
089	0.554	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
070	0.553	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
052	0.553	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
077	0.551	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
088	0.548	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
055	0.544	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
088	0.532	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
078	0.511	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
097	0.365	0.800	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
094	0.396	0.765	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.372	0.686	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
096	0.395	0.601	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
093	0.441	0.598	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
026	0.384	0.0	0.701	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025	0.380	0.0	0.697	0.0	0.0	0.0	0.0	0.0	0.0	0.0
024	0.395	0.0	0.670	0.0	0.0	0.0	0.0	0.0	0.0	0.0
027	0.302	0.0	0.637	0.0	0.0	0.0	0.0	0.0	0.0	0.0
010	0.489	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
019	0.489	0.0	0.0	0.654	0.0	0.0	0.0	0.0	0.0	0.0
012	0.471	0.0	0.0	0.612	0.0	0.0	0.0	0.0	0.0	0.0
018	0.435	0.0	0.0	0.527	0.0	0.0	0.0	0.0	0.0	0.0
027	0.461	0.0	0.0	0.507	0.0	0.0	0.0	0.0	0.0	0.0
062	0.308	0.0	0.0	0.506	0.0	0.0	0.0	0.0	0.0	0.0
065	0.275	0.0	0.0	0.0	0.731	0.0	0.0	0.0	0.0	0.0
084	0.269	0.0	0.0	0.0	0.727	0.0	0.0	0.0	0.0	0.0
061	0.296	0.0	0.0	0.0	0.698	0.0	0.0	0.0	0.0	0.0
083	0.365	0.0	0.0	0.0	0.638	0.0	0.0	0.0	0.0	0.0
054	0.0	0.0	0.0	0.0	0.555	0.0	0.0	0.0	0.0	0.0
055	0.0	0.0	0.0	0.0	0.0	0.781	0.0	0.0	0.0	0.0









	FACTOR 21	FACTOR 22	FACTOR 23
084	0.0	0.0	0.0
074	0.0	0.0	0.0
076	0.0	0.0	0.0
080	0.0	0.0	0.0
051	0.0	0.0	0.0
083	0.0	0.0	0.0
085	0.0	0.0	0.0
045	0.0	0.0	0.0
073	0.0	0.0	0.0
075	0.0	0.0	0.0
082	0.0	0.0	0.0
071	0.0	0.0	0.0
046	0.0	0.0	0.0
079	0.0	0.0	0.267
081	0.0	0.0	0.0
081	0.0	0.0	0.0
086	0.0	0.0	-0.255
039	0.0	0.0	0.0
050	0.0	0.0	0.0
091	0.279	0.0	0.0
029	0.0	0.0	0.0
047	0.0	0.0	0.0
089	0.0	0.0	0.0
070	0.0	0.0	0.0
052	0.0	0.0	0.334
077	0.0	0.0	0.0
048	0.0	0.0	0.0
055	0.0	0.0	0.0
088	0.339	0.0	0.0
078	0.0	0.0	0.369
097	0.0	0.0	0.0
098	0.0	0.0	0.0
099	0.0	0.0	0.0
100	0.0	0.0	0.0
096	0.0	0.0	0.0
093	0.0	0.0	0.0
026	0.0	0.0	0.0
025	0.0	0.0	0.0
024	0.0	0.0	0.0
027	0.0	0.0	0.0
010	0.0	0.0	0.0
09	0.0	0.0	0.0
012	0.0	0.0	0.0
08	0.0	0.0	-0.316
07	0.0	0.0	-0.299
062	0.0	0.0	0.0
065	0.0	0.0	0.0
068	0.0	0.0	0.0
041	0.0	0.0	0.0
063	0.0	0.0	0.0
056	0.0	0.0	0.0



## **APPENDIX E**

**The Sorted Rotated Factor Loadings of the 49 Selected Items  
from the "Soldier Opinion Questionnaire" (Varimax Rotation)**

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# The Sorted Rotated Factor Loadings of the 49 Selected Items from the "Soldier Opinion Questionnaire" (Varimax Rotation) \*

THE VP FOR EACH FACTOR IS THE SUM OF THE SQUARES OF THE ELEMENTS OF THE COLUMN OF THE FACTOR PATTERN MATRIX CORRESPONDING TO THAT FACTOR. WHEN THE ROTATION IS ORTHOGONAL, THE VP IS THE VARIANCE EXPLAINED BY THE FACTOR.

## SORTED ROTATED FACTOR LOADINGS (PATTERN)

	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4	FACTOR 5	FACTOR 6	FACTOR 7	FACTOR 8	FACTOR 9	FACTOR 10
074	0.778	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
080	0.774	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
074	0.744	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
051	0.740	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
097	0.873	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
098	0.865	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100	0.726	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
026	0.0	0.0	0.781	0.0	0.0	0.0	0.0	0.0	0.0	0.0
027	0.0	0.0	0.754	0.0	0.0	0.0	0.0	0.0	0.0	0.0
025	0.0	0.0	0.753	0.0	0.0	0.0	0.0	0.0	0.0	0.0
065	0.0	0.0	0.0	0.853	0.0	0.0	0.0	0.0	0.0	0.0
044	0.0	0.0	0.0	0.774	0.0	0.0	0.0	0.0	0.0	0.0
042	0.0	0.0	0.0	0.741	0.0	0.0	0.0	0.0	0.0	0.0
088	0.0	0.0	0.0	0.0	0.826	0.0	0.0	0.0	0.0	0.0
058	0.0	0.0	0.0	0.0	0.821	0.0	0.0	0.0	0.0	0.0
030	0.0	0.0	0.0	0.0	0.605	0.0	0.0	0.0	0.0	0.0
040	0.0	0.0	0.0	0.0	0.0	0.873	0.0	0.0	0.0	0.0
034	0.0	0.0	0.0	0.0	0.0	0.849	0.0	0.0	0.0	0.0
031	0.0	0.0	0.0	0.0	0.0	0.0	0.772	0.0	0.0	0.0
083	0.0	0.0	0.0	0.0	0.0	0.0	0.599	0.0	0.0	0.0
036	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.870	0.0	0.0
035	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.835	0.0	0.0
016	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.773	0.0
018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.741	0.0
014	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.622	0.0
003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.839
002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.813
077	0.257	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
081	0.277	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
010	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
009	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
056	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
054	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
032	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
031	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
023	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
022	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
017	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
018	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
049	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
040	0.294	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
040	0.291	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
066	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
049	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
072	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
094	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





	FACTOR 21	FACTOR 22	FACTOR 23
076	0.0	0.0	0.0
080	0.0	0.0	0.0
074	0.0	0.0	0.0
051	0.0	0.0	0.0
097	0.0	0.0	0.0
098	0.0	0.0	0.0
100	0.0	0.0	0.0
026	0.0	0.0	0.0
027	0.0	0.0	0.0
028	0.0	0.0	0.0
025	0.0	0.0	0.0
065	0.0	0.0	0.0
064	0.0	0.0	0.0
062	0.0	0.0	0.0
060	0.0	0.0	0.0
059	0.0	0.0	0.0
058	0.0	0.0	0.0
038	0.0	0.264	0.0
040	0.0	0.0	0.0
034	0.0	0.0	0.0
030	0.0	0.0	0.0
043	0.0	0.0	0.0
036	0.0	0.0	0.0
035	0.0	0.0	0.0
016	0.0	0.0	0.0
018	0.0	0.0	0.0
014	0.0	0.0	0.0
003	0.0	0.0	0.0
002	0.0	0.0	0.0
077	0.0	0.0	0.0
081	0.0	0.0	0.0
010	0.0	0.0	0.0
009	0.0	0.0	0.0
056	0.0	0.0	0.0
054	0.0	0.0	0.0
032	0.0	0.0	0.0
031	0.0	0.0	0.0
023	0.0	0.0	0.0
022	0.0	0.0	0.0
015	0.0	0.0	0.0
017	0.0	0.0	0.0
009	0.0	0.0	0.0
068	0.0	0.0	0.0
001	0.0	0.0	0.0
048	0.0	0.0	0.0
064	0.0	0.0	0.0
004	0.0	0.0	0.0
049	0.0	0.0	0.0
072	0.906	0.0	0.0
073	0.0	0.901	0.0
094	0.0	0.0	0.915

\*The number in parentheses shows the 99-item varimax factor corresponding to each 49-item varimax factor:  
 1 (1); 2 (2); 3 (5); 4 (7); 5 (9); 6 (12); 7 (4); 8 (6); 9 (15); 10 (13); 11 (8); 12 (3); 13 (11);  
 14 (16); 15 (10); 16 (17); 17 (14); 18 (19); 19 (18); 20 (22); 21 (21); 22 (20); 23 (18).

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## APPENDIX F

The Sorted Rotated Factor Loadings of the 99 Item  
"Soldier Opinion Questionnaire" for the Half Sample  
(Varimax Rotation)

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[illegible]

[illegible]



FACIOR 21 FACIOR 22

Q76 77  
Q77 78  
Q78 79  
Q79 80  
Q80 81  
Q81 82  
Q82 83  
Q83 84  
Q84 85  
Q85 86  
Q86 87  
Q87 88  
Q88 89  
Q89 90  
Q90 91  
Q91 92  
Q92 93  
Q93 94  
Q94 95  
Q95 96  
Q96 97  
Q97 98  
Q98 99  
Q99 100  
Q100 101  
Q101 102  
Q102 103  
Q103 104  
Q104 105  
Q105 106  
Q106 107  
Q107 108  
Q108 109  
Q109 110  
Q110 111  
Q111 112  
Q112 113  
Q113 114  
Q114 115  
Q115 116  
Q116 117  
Q117 118  
Q118 119  
Q119 120  
Q120 121  
Q121 122  
Q122 123  
Q123 124  
Q124 125  
Q125 126  
Q126 127  
Q127 128  
Q128 129  
Q129 130  
Q130 131  
Q131 132  
Q132 133  
Q133 134  
Q134 135  
Q135 136  
Q136 137  
Q137 138  
Q138 139  
Q139 140  
Q140 141  
Q141 142  
Q142 143  
Q143 144  
Q144 145  
Q145 146  
Q146 147  
Q147 148  
Q148 149  
Q149 150  
Q150 151  
Q151 152  
Q152 153  
Q153 154  
Q154 155  
Q155 156  
Q156 157  
Q157 158  
Q158 159  
Q159 160

