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SOCIAL FACTORS IN SOVIET MILITARY PERFORMANCE

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EXECUTIVE SUMMARY

This paper is a brief summary of a three-part Report:


II. Leadership and the Control of Deviance in Soviet Military Units by Celia C. Lo, Michael L. Berbaum, and William Zimmerman; and


the full texts of each part are available from the Council upon request [Tel. (202) 387-0168].

The purpose of the research project was to examine the effects of certain key social factors on Soviet military performance, using a one-of-a-kind data set that for the first time offered the possibility of close statistical analysis. The data set was the Military-Civilian Survey (MCS) of the Soviet Interview Project (SIP). 1,113 men, former citizens of the USSR who had emigrated to the United States, were interviewed in 1986-87. The completed sample included 785 men who had served on active duty in the armed forces of the USSR for at least six months after 1968, when conscription laws were reformed.

The first major question addressed was the social distribution of the burden of military service (see Part I). While most men in the USSR under Brezhnev continued to meet their service obligations, a small minority were ready and able to work the system for their personal purposes. In various ways those from relatively advantaged social and economic backgrounds were able to meet, if not exactly fulfill, their service obligations through reserve service or exemption. In particular, and contrary to the Soviet Constitution and declared policy, the following variables reliably predicted lesser likelihood that a young man served on active duty as a soldier or sergeant: pre-military training, higher grades in school, father's higher social class origin, being from Moscow or Leningrad, being of a non-Russian and non-Jewish nationality (e.g., Ukrainian), and making a strong effort to avoid service.

The study next examined deviant behavior (problem drinking, theft, absences and desertion, and violence), leadership styles (task-oriented as distinguished from relationship-oriented), punishment, and performance. Among the findings were: (1) an apparently high level and variety of deviant behavior; (2) the greater a leader's task orientation the more severe the punishments for deviance; (3) leadership oriented on harmony in human relations did not diminish the level of deviance nearly so much as task-orientation (the stereotype of the Soviet officer as a goal-fixated, rule-follower may capture exactly those qualities that promote good discipline in the Soviet military); (4) task-orientation reliably predicted higher unit performance (relationship-orientation did not); and (5) unit performance was not at all related to the level of deviance.
In a comparison of performance in civilian vs. military units, consistent differences emerged. They include: (a) Composition: Military units had fewer white-collar members and more kolkhoznik and Muslim members than did civilian units; (b) Promotion Factors: Party membership, loyalty to supervisor, and nationality mattered more in the military than in the civilian sector, whereas the opposite was true for organizational ability, contacts, and education; (c) Leadership: On every direct measure, military leaders (sergeants and officers) were rated lower than civilian supervisors (foremen and managers), with the exception of political officers, campoliti, who were rated as more effective than heads of enterprise primary party organizations, or PPO’s; (d) Equipment and Training: Equipment was more adequate in the military than it was in the civilian sector, but training to use equipment was better in the civilian sector than in the military; (e) Morale and Satisfaction: Morale was generally better in civilian units; (f) Social Pathology: The military had fewer problems of deviant behavior than did the civilian sector and the punishments were harsher for infractions of discipline; (g) Social Background: Differences between ordinary soldiers versus sergeants and officers were nonexistent, whereas the foremen and managers had "better" backgrounds in terms of their educational levels and their fathers’ social status.

This paper ends on a speculative comment. The concentration of operational information at the top of the Soviet institutional hierarchies, rather than its distribution at the level of operating units, was a severe hindrance to unit performance. At the bottom of the military hierarchy where the job of soldiering, according to the stereotype, should have been an almost robot-like exercise of inculcated habit and obedience to orders, soldiers reported that they did not have enough information to do their jobs. Similarly, soldiers' reports of their training were strongly related to their ratings of their units' performance. Quite simply, modern soldiering, just like modern manufacturing, requires a devolution of autonomy (authority to make operational decisions in one's own unit) and effective participation by soldiers in the completion of complex tasks and missions using increasingly complex equipment and procedures. The hypercentralization of information and decisional authority within Soviet institutions placed great obstacles in the path to superior unit performance because it created uncertainty and did not permit unit leaders the possibility of genuine responsibility for unit performance. In the Brezhnev era the art of war was becoming more complex and increasingly required distributed activity in responsible, relatively autonomous units, a requirement that centralized Soviet institutions were failing to meet.
SOCIAL FACTORS IN SOVIET MILITARY PERFORMANCE

Summary

The purpose of this research project, conducted for the National Council for Soviet and East European Research (NCSEER), was to examine the effects of certain key social factors on Soviet military performance. At the time the data for this research were collected, some Soviet and some Western commentators tended to regard the Soviet armed forces as immune, or nearly so, to a number of social maladies that, if not strictly limited, can significantly diminish military units' readiness to fulfill challenging missions. We undertook to examine these issues using a one-of-a-kind data set that for the first time offered the possibility of close statistical analysis.

The data set employed was the Military-Civilian Survey (MCS) of the Soviet Interview Project (SIP). In 1986-87 1,113 men, former citizens of the USSR who had emigrated to the United States, were interviewed by the MCS. Interviews were conducted in Russian, usually in respondents' homes, by non-native Russian-speaking American university students, and lasted about an hour and a half to two hours. The completed sample included 785 men who had served on active duty in the armed forces of the USSR for a period of at least six months after 1968, when conscription laws were reformed. Of that number 356 were ordinary soldiers, 342 were sergeants (including two warrant officers), and 87 were officers. The sample also included 162 men who served only in the reserves (except for short periods of active duty training) and another 166 men who did not serve although they were of conscription age. The reasons why some men did not share the burden of active duty, serving instead in the reserves or not serving at all, is one of the major questions we

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1 The Soviet Interview Project was sponsored by the National Council for Soviet and East European Research, under the direction of Dr. James Millar; the Military-Civilian Survey was directed by Drs. William Zimmerman, Michael Berbaum, and Norman Nie. The survey fieldwork, coding, and computer data preparation was carried out by the National Opinion Research Center of the University of Chicago, under the supervision of Dr. Alisu Schoua-Glusberg. This Final Report was prepared by Berbaum in completion of a separate research contract from the National Council; the other scholars mentioned contributed in numerous ways to this project, but they bear no responsibility for the present report.
address. (The composition of the sample is described in greater technical detail in the appropriate sections of the papers that comprise the body of this report. Concerns about the possible biases that may undermine conclusions based on a selective emigrant sample are also addressed there.)

From the outset the authors of the MCS questionnaire recognized that comparisons between retrospective reports about Soviet institutions and Western data about Western institutions were scientifically insupportable: there were too many uncontrolled factors, so that any similarities or differences found could have been explained away in a dozen alternate ways. Therefore, the decision was made to compare work units (squads, platoons, companies) within the Soviet military and work units (sections, departments) within Soviet civilian institutions such as bureaus and factories. Parallel questions, often with identical wording, were posed to each respondent about his military job and then his later civilian job during the "last normal period" before he applied for permission to emigrate. Thus, the MCS questionnaire consisted of five modules: Module A contained questions to establish a respondent's eligibility for the full survey; Module B collected a variety of social background and work history information, as well as branching questions to guide the interviewers to either Module C or D (skipping C); Module C contained questions specifically aimed at reservists and nonservers, and when completed terminated the interview; Module D contained 80 questions, many with sub-parts, about the respondent’s military training and period of service in an active duty unit; Module E repeated 47 questions almost identical to those in Module D that concerned the respondent’s subsequent civilian workplace unit (many questions about the military did not make sense to pose about civilian work and were omitted), and when completed terminated the interview. Interviewers privately completed Module F about the conditions of the interview situation that might have affected the respondent’s answers (e.g., respondent inattentive or drunk, other members of the household

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2It was not the purpose of the research to compare the quality or economic efficiency of production for military customers versus civilian customers; our interest lay in comparing social processes and their consequences within military units and within civilian workplace units.
intruding into the interview). From all accounts—and examination of interviewers’ answers in Module F—the interviewers were warmly welcomed into the respondents’ homes and respondents were eager to recount their experiences, including military experiences, in their former homeland.

The first major question we addressed was the social distribution of the burden of military service (see Part I). In the Brezhnev era past policies of universal conscription for military service continued. This policy aspired to implement the Soviet Constitution’s clauses that made service a right and duty of all men regardless of native language, place of residence, social background, and so on. We conducted several statistical analyses that revealed practice to have been somewhat at variance with declared regime policy. Put simply, in various ways we found that those from relatively advantaged social and economic backgrounds were able to “work the system” to meet, if not exactly fulfill, their service obligations through reserve service (supposedly a prelude to active duty, but rather often not) or exemption: In particular, we found that, contrary to the Soviet Constitution and declared policy, the following variables reliably predicted whether or not a young man served on active duty as a soldier or sergeant, the two most onerous forms of active duty service (where or not included service as an officer, reserve service, or exemption): pre-military training, grades in school, father’s social class origin, being from Moscow or Leningrad, being of a non-Russian and non-Jewish nationality (e.g., Ukrainian), and making a strong effort to avoid service. These features made it less likely that a young man served as a soldier or sergeant. We interpreted this finding as consistent with a personnel maximizing strategy that would have allowed young men pursuing studies in scientific, engineering, and other sought-after specialties to continue their studies with minimal interruption. (We did not, however, claim that this was an actual policy kept secret, but rather an implicit policy, one that may have represented an implicit bargain between the regime and those elites on whose help it relied.) In any event, while most men in the USSR under Brezhnev continued to meet their service obligations, there is evidence that a small minority were ready and able to work the system for their more personal purposes.
The design of the MCS questionnaire allowed for a particularly elegant demonstration of this conclusion. Early on in Module B we asked, "How was your health at age 17?" Later in Module C we asked those who had sought exemption from service what grounds they had offered to the authorities to justify exemption. What we found was that a large portion of those who offered "health problems" as their reason for seeking exemption had reported to us twenty minutes earlier that their health just a year or so before had been good or excellent. We followed up on this with a more precise statistical analysis that confirmed the basic point, namely, that those who sought and received bogus exemptions were from "better" social backgrounds. We also found that those who reported that they made a great effort to avoid military service, more often than others who reported a lesser effort, in fact did not serve.

The picture that emerged from our study of service avoidance (Part I) was very clear and proved consistent with reports that began to appear in the freer Soviet press under Gorbachev: as with most complex industrial societies, there is social stratification in the distribution of important benefits and burdens, and so too in the Soviet Union in the Brezhnev era there was a larger-than-acknowledged stratification in bearing the burden of military service. There is no metric on which we can place the degree of stratification evident from our analysis, but it was surely somewhat less then in the U.S. during the pre-lottery Vietnam-era draft and much less than in the "Volunteer Army"-era that followed. In any event, it was sufficient to be noted and resented, to some fairly minor degree weakening the regime's legitimacy among the Soviet people. Our data were collected before the Afghanistan incursion in 1979, but it is a sure bet that the resentment of seemingly unfair delays entering active duty (while in the reserves), or outright exemption, can only have increased when the numbers of battlefield casualties rose. In short, the problems we detected in peacetime must have been exacerbated during the time of the Afghanistan conflict.

Having established systematic social stratification in the process of entry into the Soviet military in the late 1970's, we turned our attention to the existence and nature of deviant behavior within active duty military units. Now all military units experience a steady stream of low-level deviant behavior ("discipline problems")—fights among soldiers, soldiers
not reporting to duty on time, theft of supplies—as well as, occasionally, more serious
infractions—absences without leave, soldiers striking an officer, or desertion. It is a unit
commander's job to reduce these infractions to a minimum and to direct subordinates' energy
toward mission-relevant activities: that is one task of military leadership and was the second
major question we addressed in this research (see Part II). Specifically, we developed a
model of the role of leadership in the control of deviant behavior in small-sized groups or
organizations and applied it to the MCS Soviet military data.

The first point to make is that there was apparently more than a little deviant behavior
in Soviet units of the period. Module D of the MCS questionnaire included a series of items
about: (a) the effects of certain infractions on unit performance, (b) the punishment typically
assigned for those infractions, as well as (c) whether soldiers ever struck officers or vice
versa, (d) theft of equipment, and (e) incidence of deaths in the unit owing to accident,
suicide, or murder. Our respondents reported seemingly high levels of these deviant
behaviors and an increasing scale of punishment to fit the seriousness of the infraction. In
other words, there was an ample quantity and variability of deviant behavior for the leaders
to attempt to control.

For purposes of analysis we identified two styles of leadership, task-oriented
leadership and relationship-oriented leadership. Task-oriented leaders are those whose
primary concern is with task completion and compliance with procedural requirements;
relationship-oriented leaders are those who place great value on cooperative, harmonious
personal relations among unit members and on the personal welfare of individual workers.
Research has shown that most leaders tend in their behavior to exhibit one orientation more
strongly than the other, though the orientations are not mutually exclusive and it would be
quite normal for a task-oriented leader to show a genuine but secondary concern for

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Reports of infractions were on a scale from "very often" to "never," so these judgements
are relevant to the Soviet situation only. For comparative purposes one would want to
have data gathered officially and comprehensively by a trustworthy reporting system, not
self-reports from individual soldiers. We term the rate of deviant behavior seemingly high
because soldiers and sergeants themselves reported it as occurring "often" and many reported
actual deaths due to misadventures of one kind or another in their units.
relationships with and among subordinates. We developed measures of the strengths of the two leadership orientations for the officers who supervised our respondents (about half of whom were soldiers and the other half sergeants). Using these variables we could examine the role of leadership in the control of deviance in Soviet military units.

One of the key variables in most theories of behavioral control (deterrence) is the severity of punishments applied. As mentioned earlier, our respondents reported that more severe punishments were applied to more severe infractions, as expected. We examined the relationship of leadership style to the severity of punishments and found that task-oriented leadership is strongly associated with severity of punishment, whereas relationship-oriented leadership has only a modest (but reliable) relationship with severity of punishment. The meaning of this finding is that the greater a leader's task orientation, the more severe the punishments applied to breaches of discipline.

The level of deviance in units (a combination of four kinds of deviant behavior: problem drinking, theft, absences and desertion, and violence) could then be traced to three main factors: task-oriented leadership, severity of punishment (which was affected by task-oriented leadership), and working conditions. Working conditions--defined principally by the quality and quantity of the equipment available to perform the mission--affected deviance directly and presumably reflected the level of frustration involved in trying to perform a challenging job with inadequate equipment, as we would expect. But the other two variables are behavioral in origin and strongly reflected the leadership orientation of unit leaders. In particular, task-oriented leaders seem to have created a climate of clear normative expectations: subordinates knew what tasks they were expected to do and they knew what they could expect to happen if they resisted through various forms of disobedience.

Thus, our investigation of leadership in small Soviet military units has yielded an apparent anomaly: Being relationship-oriented (human relations oriented) did not diminish the level of deviance nearly so much as did being task-oriented. The stereotype of the Soviet officer as a goal-fixated rule-follower may in fact capture exactly those qualities that promote good discipline in the Soviet military. We may also add that task-orientation was also a reliable predictor of unit performance (relationship orientation was not), but unit performance
was not at all related to the level of deviance reported in a unit. (We will have much more to say about predicting performance below.) Our general model of leadership and the control of deviance was confirmed with Soviet data. A final point in this connection is that the model works best for the most severe deviance, violence, and somewhat less well, though certainly adequately, for other less severe infractions. We suspect that the lesser infractions were simply ubiquitous in Soviet society in general and were therefore relatively difficult to control even within the military setting, whereas outright violence was relatively more sensitive to the climate of expectations the better officers created.

We have shown that in the Brezhnev era there was some although not great resistance to military service (which at the time was surely deviant), especially among the more advantaged youth, and we have shown that deviance in military units, though endemic, can be controlled with task-oriented leadership and stiff punishments. Perhaps the most puzzling result in the analysis of deviance is that task-oriented leadership affects both deviance and unit performance, but there is in that analysis little visible relationship between performance and deviance. In fact, this finding is less anomalous than it seems in the sense that it is quite common for performance measures to be weakly or not at all related to measures of satisfaction or dissatisfaction (undiscipline, deviance) in group and organizational studies. The common-sense notion that dissatisfaction—and certainly deviance—should interfere with task performance on the job is actually difficult to establish empirically in many work contexts.

We conducted an extensive analysis of the effects of social factors of all kinds on performance in military units (see Part III). The measure of unit performance in Module D (and in Module E for civilian units) was a 0 to 100 degree "thermometer" rating of how well the unit performed its mission. In addition, our analysis of unit performance included the following categories of explanatory variables: (a) respondent characteristics, (b) unit composition (ethnic composition, size), (c) factors considered in promotion decisions, (d) characteristics of leaders, (e) mission definition and resource adequacy for that mission, (f) morale and satisfaction, and (g) social pathology (deviance). Each of these categories contained between 4 and 14 specific variables (see Part III, Table 2), which were usually
available for both military and civilian units. This comprised a rich collection of measures for 785 soldiers, sergeants and officers and the quantitative analysis, which was rather complex, proceeded in several stages.¹

There are a number of important points to note about the descriptions respondents offered of their workplaces before we discuss how these variables relate to unit performance. First of all, respondents tended to be rather consistent in their ratings: a person who rated the equipment as poor in the military tended also to rate the equipment as poor in his civilian workplace, and a person who said loyalty to one’s boss was important to being promoted in the military tended to say the same thing about the civilian sector as well. (This is shown in column 2 of Table 2, Part III.) This consistency was expected and is in fact something that can be taken advantage of to increase the precision of the statistical analysis. The second point is that respondents quite reliably reported differences between the military and civilian sectors in all categories of variables (except respondent characteristics of course, since the respondents were the same men for both sectors). A brief catalog of those differences includes: (a) Composition: Military units had fewer white-collar members and more kolkhoznik and Muslim members than did civilian units; (b) Promotion Factors: Party membership, loyalty to supervisor, and nationality mattered more in the military than in the civilian sector, whereas the opposite was true for organizational ability, contacts, and education; (c) Leadership: On every direct measure, military leaders (sergeants and officers) were rated lower than civilian supervisors (foremen and managers), with the exception of political officers, zampoliti, who were rated as more effective than heads of enterprise primary party organizations, or PPO’s; (d) Equipment and Training: Equipment was more adequate in the military than it was in the civilian sector, but training to use equipment was better in the civilian sector than in the military; (e) Morale and Satisfaction: Morale was generally better in civilian units; (f) Social Pathology: The military had fewer problems of deviant behavior than did the civilian sector and the punishments were harsher for infractions

⁰Owing to missing data, such as a respondent’s omission of the unit performance rating for either his military or civilian unit, the regression analysis reported here is based on 502 cases with nearly complete data.
of discipline, although brief absences were more common in the military. Overall, the differences may be summarized as military organizations having better ratings for equipment (material resources) and better control of deviant behaviors (lower rates of infractions, stiffer punishments), but having worse ratings for promotion factors, leadership, and morale. Thus, ratings by our respondents allowed a clear differentiation between the two kinds of organizations on which they were asked to report and the patterns of these differences were very much in accord with non-Soviet observers' understandings; that is, the ratings seemed to us quite sensible. (All this is seen in Table 2, Part III.)

Although respondents in general described the organizations much as we would expect, we wished to consider whether there might be important differences in the descriptions offered by soldiers in comparison with sergeants and officers and by workers in comparison with foremen and managers. It might be expected that those located at different levels of the respective hierarchies might, because of their different roles, have different experiences and different information about the various aspects of the work unit. This comparison is shown in Table 3. A few prominent differences may be noted. First, social background differences between ordinary soldiers versus sergeants and officers were nonexistent, whereas the foremen and managers had "better" backgrounds in terms of their educational levels and their fathers' social status, and of course they enjoyed higher incomes. The only difference in terms of unit composition was that foremen and managers reported that their civilian units had a higher proportion of kolkhozniks (farmers) than did workers' units. This finding may simply reflect the fact that foremen and managers were more likely to have this information (or impression) about their less skilled subordinates. In the military there were differences between ordinary soldiers and sergeants and officers in their appreciation of the factors that might have affected promotions. Soldiers believed that

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9 Recall that the same respondents answered both the military and the civilian questions. In the military our respondents' positions were not based on their backgrounds: ordinary soldiers came from a mixture of backgrounds, as did the sergeants. In the civilian sector the stratifying effects of social background were restored: social processes in effect sorted people into the ranks of workers and supervisors on the basis of their backgrounds, which included educational attainment.
loyalty and contacts mattered more than did sergeants and officers, whereas sergeants and officers believed that education mattered more than did soldiers. This seems to be the "natural" self-justification by people of different ranks of their relative positions within the hierarchy. In the civilian sector the workers rate the equipment more highly than do foremen and managers, and discount the proposition that disobedience of instructions is due to lack of equipment. Finally, again in the civilian sector, workers credit the existence of much more brief absenteeism than do foremen and managers. To summarize the key differences then:

In the military the soldiers credit "non-rational" promotion criteria as important, whereas the sergeants and officers cite education as being of higher importance. In the civilian sector, social background differences between workers and foremen and managers reassert themselves (after the "class mixing" of the military). Moreover, workers rate the equipment better and the absenteeism as more severe than do foremen and managers. There were thus fairly clear and eminently plausible differences between supervisors and subordinates in the two sectors, and these seemed important to consider in our account of performance.

The analysis of military and civilian unit performance ratings employed an econometric technique called seemingly unrelated regressions to examine the two sectors simultaneously. Thus, one equation examined military unit performance as a function of military explanatory variables and a second equation examined civilian unit performance as a function of civilian explanatory variables. Of course, the explanatory variables for the two equations were the almost-identically-worded parallel measures for the two sectors from Modules D and E. Each variable in each equation had an associated coefficient that was tested for statistical significance to determine whether that variable had a reliable impact on unit performance. Further, differences in variable impact between supervisors and subordinates could be tested, as could the differences in impacts on performance of comparable variables in the two sectors. A complex set of findings results (Table 4, Part III); we highlight only the strongest findings in this summary.

Soldiers’ or workers’ ratings of promotion factors fail to show any relationship to unit performance. This is not surprising because they are not in a position to have much information about the actual criteria that were used. Supervisory personnel, however, did
have ratings of promotion factors that related to performance and differed between sectors. In the military sergeants' and officers' ratings of loyalty as a promotion factor (noted earlier) was a severe hindrance to good unit performance; in the civilian sector foremen's and managers' ratings of party membership and experience as promotion factors were strong contributors to good unit performance, and these differences in the pattern between sectors were highly reliable. It is clear that promotion for loyalty was a minus in the military, whereas use of "rational" criteria was a plus in the civilian sector. (Note that capable people were often coopted into the Party and Party membership often allowed a supervisor to exercise greater influence or authority, which could be extremely beneficial for the unit.)

One extremely interesting difference between sectors concerns whether respondents considered that they had enough information to do their jobs well. In the military the soldiers' coefficient for "job information" was high, as was that for sergeants and officers (though less so), indicating that in military units the fact that people had needed information was a major contributor to higher unit performance ratings. (More accurately, when a respondent said soldiers had the necessary information, then on average he rated unit performance higher.) The same was not true in the civilian units and this was a reliable difference between subordinates in the two sectors.

In both sectors alike, soldiers' and workers' indication that low morale led subordinates not to follow instructions was strongly related to deficits in performance. Note that morale as a variable had little or no relationship with unit performance. But when low morale was reported as a reason why instructions were not followed, then the impact was severe; that is, morale was important for performance when it affected task- or mission-related work behavior.

In both the military and civilian sectors the key variables in the pathology category that related to performance were those that asked whether people were genuinely "at work." In both sectors the frequency of brief absences from work reported by subordinates was a reliable predictor of lower performance; this was true for supervisors in the civilian sector as well, but not for sergeants and officers, a difference between supervisors in the sectors that
was reliable. Moreover, in the civilian sector workers' reports (but not foremen's or managers') of major absenteeism related to poorer performance, as well. Finally, to complete this picture, in the civilian sector, foremen's and managers' reports that stricter punishments were employed for absenteeism were associated with higher unit performance. Thus, much more in the civilian sector than in the military, minor and major absenteeism from work were associated with poorer unit performance, and supervisors' responses associated use of stricter punishments with higher performance. Two additional results may be mentioned in this context. First, for civilian supervisors only, the fraction of the unit involved in the theft of equipment and the amount of alcohol abuse were negatively associated with performance. And for soldiers only, reports that ordinary soldiers were hurt by sergeants and officers were associated negatively with unit performance. It seems likely that these pathologies were easier to avoid in the sectors where they showed no effect; that is, theft and alcoholism may be limited by the isolation and stringency of military life, while physical abuse of subordinates could be seen and stopped by civilian coworkers, Party representatives, or union officials. There are after all important institutional-structural differences between the two organizational types.

We note in conclusion of this discussion of unit performance that the coefficients of determination ($R^2$'s) for the two sectors were satisfactory, .50 for military performance and .41 for civilian performance. These figures indicate that a credible percentage of the variability in rated unit performance was attributable to the variables we examined; indeed, these figures are in the upper range of those observed for regression analyses of individual-level data such as we performed. Given the wide scope of the variables employed in the model, it seems unlikely that inclusion of additional variables would yield more than slight improvements in the fit of the models.

**Concluding Remarks**

It may be worthwhile to conclude with a few remarks about deviant behavior and performance in Brezhnev-era Soviet military units that are somewhat more impressionistic and speculative than the close review of survey findings presented above. These remarks go
beyond the evidence in the narrowest sense, but may help illuminate the connective web of which separate results are but parts.

1. In the late Brezhnev era there was a lack of enthusiasm for military service among some young men and their families, and though not widespread or overwhelming, it was strongest among social elites, and elite young men were most likely to have deferred or been exempted from active military service. These facts will have to play a role in the broader historical interpretation of regime-society relations during this period. Perhaps we have uncovered seeds of discontent that were always present but could not sprout in the stony ground of the Soviet political system. But it may also be that the trend in discontent in this and other realms was tending upward, that seedlings of discontent were finding ever more crevices in the system where they could put down roots. Whatever history’s judgement, we have in this domain refuted claims for Soviet military institutions of a certain social exceptionalism: the stakeholders in the system were those who could “work the system” for their own benefit.

2. The keys to higher unit performance and lower rates of deviant behavior, in both the military and the civilian sector, lay in creating an orderly work environment, one in which work expectations were clear and punishments for infractions were relatively stiff. Generally speaking, these conditions were easier to bring about in a military organization whose reach was intended to extend to every minute and cranny of soldiers lives in barracks, a fact which may ultimately account for the higher predictability of military than civilian unit performance. The two enemies of good order in a unit—lack of (work) discipline among soldiers and workers internally, and the chaotic uncertainty in the units’ external environment, however “planned” it was in theory—could be at least partially overcome through the selection of effective leaders on grounds of competence rather than personal loyalties.

3. The concentration of operational information at the top of the Soviet institutional hierarchies, rather than distributing it at the level of operating units, was a severe hindrance to unit performance. This is our most speculative remark and what we have in mind is this: At the bottom of the military hierarchy where the job of soldiering, according to the
stereotype, should have been an almost a robot-like exercise of inculcated habit and obedience to orders. Soldiers reported that they did not have enough information to do their jobs. Similarly, soldiers reports of their training were strongly related to their ratings of their units' performance. Quite simply, modern soldiering, just like modern manufacturing, requires a devolution of autonomy (authority to make operational decisions in one's own unit) and effective participation by soldiers in the completion of complex tasks and missions using increasingly complex equipment and procedures. The hypercentralization of information and decisional authority within Soviet institutions placed great obstacles in the path to superior unit performance because it created uncertainty and did not permit unit leaders the possibility of genuine responsibility for unit performance. In the Brezhnev era the art of war was becoming more complex and increasingly required distributed activity in responsible, relatively autonomous units, a requirement that centralized Soviet institutions were failing to meet.