

VI. Results

DESCRIPTIVE RESULTS

Work and work conditions

Both the physical and social characteristics of the work and work conditions of prison personnel were studied extensively. Descriptive results on these aspects have been already previously reported in Finnish (135, 136). In this report only a summarizing overview of the details of the subjective work environment is presented. The marginal distributions of the data can be found in the questionnaires (appendices IV & V⁴).

The Finnish prison personnel (all occupational groups) perceived their work as mentally stressful. More than half of the whole population studied considered the mental requirements of the work to be too heavy, while the physical strain of the work was assessed as appropriate or somewhat too low. Only one-tenth of the respondents described their work as physically too heavy. A majority (68 %) of the personnel were of the opinion that the work demands had been increasing with time. The most important reasons given in an open question indicated that the increase in the work demands was mostly due to the an increase in work load caused by changes made in the prison organization and in the goals of prison care.

Those who perceived the work as men-

tally stressful were the teaching and health personnel, the principal guards, and the administrators in particular. The guards experienced their work as physically heavy more often than the other occupational groups.

A particularly difficult problem in Finnish prisons is the number of prisoners. Often the prisoner population even exceeds the capacity of the prison by more than 100 %. Therefore the number of staff members was considered insufficient because it is regulated by the recommended capacity of the prison.

Drafty, impractical, gloomy and crowded work spaces, as well as poor staff facilities, were common flaws in the physical work environment. These conditions varied somewhat among prisons, depending on the style and date of construction of the institution.

Prison personnel perceived their work as demanding in regard to certain social and psychological aptitudes and skills, eg, the ability to cope with other people, self-control, flexibility, mental endurance, and carefulness.

About 60 % of the personnel considered the work as suitably varying. However, about one-fifth of the personnel found the work either too varying or too monotonous.

As in any work involving the care of other people, responsibility is also great in the care of prisoners. Half of the prison personnel studied perceived the responsibility in the work as too high.

The organization and the administrative structure in the prisons are hierarchi-

⁴ If the appendices are not included in this issue, they are available from the author upon request.

cal. Communication with the upper echelons of the hierarchy was considered poor, and possibilities to participate were perceived as insufficient. The employees were of the opinion that their views on prison problems and work conditions did not reach the decision makers. On the other hand, the information reaching the employees was incomplete and often arrived too late. A majority of the employees was of the opinion that reforms are nowadays made too rapidly and the position of the employees is forgotten when reforms are planned.

Due to the nature of the care of prisoners, the employees experienced contradicting pressures caused by the fact that the expectations and opinions of the employees differed from those of the prisoners. In addition, prison personnel did not always agree with government administrators on the goals of the care of prisoners. Also the opinions of the different occupational groups differed. The inconsistencies between official regulations and existing practice also caused conflict.

The quality of the social relations between staff groups is especially important in closed organizations which characterize also the private living surroundings of a part of the personnel. A large majority did not experience major problems between various staff groups. However, half of the staff found the administrators' attitudes towards the well-being of the staff at least somewhat ignorant. Also the trust exhibited by the administration was perceived as lower than that by co-workers and immediate supervisors. Generally, the interrelations among the staff were found to be tense by 27 % of the respondents.

The residents of the prisons, the prisoners, are in custody against their will. This antagonism characterizes all work in prisons. The attitudes of the prisoners may cause mental pressure and a feeling of physical insecurity in staff members. Discipline problems were rather common among those staff groups who were responsible for the maintenance of order. About one-fourth of all employees perceived prisoner threat as a great problem. The responsibility of insuring the safety of other people was considered a bigger problem than maintaining one's own

safety. The physical threat against security was, however, a minor problem in comparison to the psychological pressure coming from the prisoners. The personnel also perceived the prisoners as untrustworthy and hostile. If a staff member considered rehabilitation as an important goal of his work, he possibly felt himself helpless and frustrated by not being able to help the prisoners. The possibilities for rehabilitative approaches were hindered by, among other things, overpopulation and hence a lack of time to discuss with prisoners. Certain occupational groups experienced mental pressure due to the fact that insufficient means existed with which to rehabilitate the prisoners.

The attitudes of the employees were mostly pro discipline in prison care, but also the development of trustworthy relations between the inmates and the staff were considered important. The attitudes were fairly liberal towards an increase in educational rights of the inmates and their participation in the planning of their own labor service. On the other hand, a majority was of the opinion that the prisoners already had too much liberty and conditions were too good.

Probably due to the hierarchical structure of the organization and the legislative basis of its function, the possibilities for professional advancement were considered poor. A majority considered the salary as satisfactory. One-third, however, found it too low in comparison to their education, tasks, and responsibility.

About one-half of the prison employees considered their own work as important and significant, but believed that other people viewed it with fairly low esteem. A perceived lack of appreciation was reflected also in such claims that the position of the inmates is under continuous improvement but not that of the staff.

Additional stress factors on a part of the personnel (58 %) were shift work and problems related to living in such a close proximity to the prison, often far from other people. Almost all of the employees would have preferred living outside the surroundings of the prison. Only every tenth staff member did not mind living, or would preferably live, within the area of the prison.

The guards experienced more problems

than the other occupational groups in their work, in the organization of the institution, and in their relations with the prisoners. Their professional satisfaction was also the lowest, and they found the least possibilities for personal development. They considered the appreciation shown by society as insufficient.

Job satisfaction

The responses to different questions on job satisfaction gave somewhat varying results. The distributions are, however, similar in form. To the general question "Do you like your present job?" over 90 % of the respondents gave an affirmative answer ranging from "very much" to "somewhat." The question on satisfaction at the present workplace evoked the same

type of answers even though there was an increase in the number of negative answers. Feelings of mental satisfaction in work and experiences of being in the right profession corresponded to the other answers. Every fourth respondent would have liked to change jobs if possible, and two-thirds of all the respondents had regretted their vocational choice (fig 11 & 12).

Occupational distributions revealed the highest job satisfaction in the special occupations (work foremen and educational and nursing staff). Job dissatisfaction was, in turn, the most common in occupations responsible for guarding and the maintenance of order.

Significant differences were found between the staff in various prisons. These differences were not systematic, eg, by type or geographic location of the prisons.

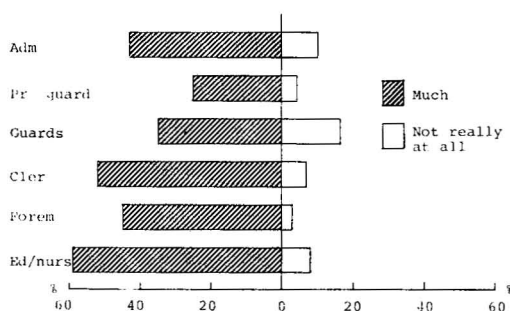


Fig 11. Distribution of responses to the question "Do you like your present job?" The columns indicate responses other than "somewhat." (adm = administrators, pr guard = principal guards, cler = clerical staff, forem = foremen, ed/nurs = educational and nursing staff)

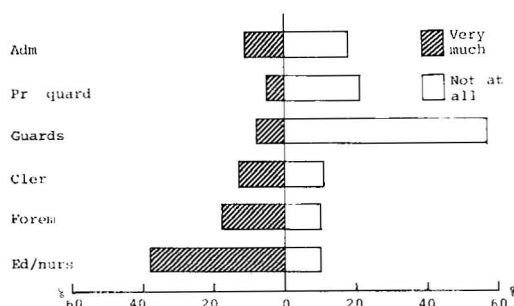


Fig 12. Distribution of responses to the question "Does your present job give you mental satisfaction?" The columns indicate responses other than "somewhat." (adm = administrators, pr guard = principal guards, cler = clerical staff, forem = foremen, ed/nurs = educational and nursing staff)

Stress reactions and health status

The basic descriptive results on stress-reactions and health problems have been previously reported in full in Finnish (135). In the present report only a summary of the main findings is presented. The distribution of the data is given in the questionnaires (appendices IV & V⁵).

Perceived symptoms

The most common psychological symptoms were worry, depression, memory problems, tension, fatigue, and sleep disturbances. Over two-thirds of the respondents were bothered by these symptoms often or sometimes.

The most common somatic symptoms were neck and shoulder pain and stomach problems. Two-thirds of all the respondents were bothered by these symptoms either often or occasionally and more than half complained of eye pain and irregularity of heart function as a symptom experienced often or sometimes.

Some symptoms were studied in connection with the health examination. The items of the health questionnaire were dichotomic. Almost half of the employees

⁵ If the appendices are not included in this issue, they are available from the author upon request.

complained of back pain (44 %), 29 % complained of chest pain, 16 % of vertigo, and 14 % of the respondents had a headache more often than once a week.

One-third of the respondents rated their general status of health as good or excellent, and more than half rated it as satisfactory. One in ten considered his health status as poor. The guards, except junior guards, and the workshop foremen perceived their health status as worse than the other occupational groups. According to this subjective evaluation the junior guards, educational and nursing personnel, and the administrators were the healthiest. The better subjective health of the junior guards may be partly based on their younger age.

The mean number of sickness absences during the 12 months preceding the study was 9.5 d (SD 26.6 d). The total number of self-reported absences corresponded to the statistics of the prison administration covering several years. The variation between the absences was very great. Some long absences, eg, of several months or a year, affected the mean of this result.

The use of alcohol was measured with four questions. The rates of reported alcohol consumption were quite low. A large proportion (41 %) of the respondents never got drunk on the basis of their own report. The use of alcohol was no problem for 84 % of the respondents.

The proportion of smokers was perhaps smaller than could have been expected in this group of mostly men working in surroundings where smoking is thought to be quite common. The proportion of nonsmokers corresponded roughly to the proportion of nonsmokers in the Finnish population in general (220). Many of the nonsmokers had stopped smoking.

To the question concerning the need for mental health services 16 % of all the respondents gave an affirmative answer. The variation in the answers was great between the occupations. About one out of every five participants did not know a person with whom they could talk about their own personal problems.

Laboratory examinations

Half of the prison employees had a blood pressure which deviated from normal (40 a of age or older: systolic pressure

≥ 160 mm Hg and/or diastolic pressure ≥ 95 mm Hg; and 35 a of age: systolic pressure ≥ 150 mm Hg and/or diastolic pressure ≥ 90 mm Hg or a previously prescribed medication for hypertension). Among the women 44 % had an elevated blood pressure (or medication). The corresponding figure was 53 % for the men. The diastolic blood pressure was equal to or exceeded 100 mm Hg in one quarter of the personnel. A corresponding image of the prevalence of the hypertension is received from the statistics based on repeated measurements of the blood pressure of the whole staff in the Sukeva prison (Rechardt, unpublished results). The data on blood pressure are given according to occupation in fig 13.

The estimation of the prevalence of hypertension in the Finnish population, based on representative samples, is 10–11 % among men over 50 a of age and 20–35 % among the women of the same age. Compared to these figures the prevalence among the present study group comprising mostly men and even younger age groups (40 and 45 a) was higher than expected.

The chest radiographs revealed a normal status for 67 % of the employees.

The levels of the serum cholesterol were the following: 73 % had cholesterol levels below 8.0 mmol/l, one in five had a cholesterol level between 8.0 and 8.9 mmol/l, and 9 % had a clearly elevated level (9 mmol/l or higher).

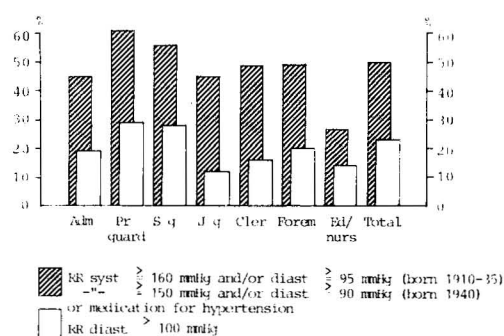


Fig 13. Hypertension by occupational group. (adm = administrators, pr guard = principal guards, s g = senior guards, j g = junior guards, cler = clerical staff, forem = foremen, ed/nurs = educational and nursing staff, RR syst = systolic blood pressure, RR diast = diastolic blood pressure)

An electrocardiogram was taken only of the employees in some prisons in southern Finland because of practical reasons. A normal finding was received from 72 % of all those tested. The rest had either a clear positive finding or were sent for a follow-up examination.

The results of the chest radiographs and the electrocardiograms corresponded to findings from other Finnish occupational groups. The cholesterol values were slightly higher than expected (Backman, unpublished data).

Positive aspects of health

The indicators of positive aspects of health covered, in this study, the degree of positive feelings and resources in regard to human relations, social participation, hobbies, etc. The results indicated that most of the items reflecting social activity and health resources were rated on the positive end of the three-class scale. Only one of the 22 items (discussions in groups) was perceived as unpleasant rather than pleasant. The standard deviations were, however, quite large for some items, and this variation indicates that there were also individuals whose ratings on the positive health items were on the negative side of the scale.

Stress reactions and health status by occupation, age and length of service

As the prison personnel under study comprised various occupations in which the

goals, contents and immediate work surroundings vary, attention was paid to the occupational differences in the stress reactions and other problems of health. Distributions of certain indicators are given according to occupational group in table 9.

The perceived symptoms, reported illnesses, and the results of the laboratory measurements differed considerably between the occupational groups. Both the perceived and observed problems of health were the most common among the principal and senior guards. For example hypertension seemed to be especially common among employees on guard duty (fig 13). More than half of the guards had a blood pressure which exceeded the normal values defined by the World Health Organization.

Observed physical problems were, however, almost as common in the group of foremen, who also perceived their general health status as lowered relatively often. Absenteeism was as common among them as in the groups of principal and senior guards. They reported however relatively few perceived physical and mental symptoms. The educational and nursing personnel had the least amount of health disorders. Also the administrators and clerical staff had fewer health problems than the principal and senior guards. Among the clerical staff certain physical symptoms dominated which were probably related to the ergonomic aspects of work (neck and shoulder pain, pain in the eyes). Among the administrators and the educational and nursing personnel certain psychological

Table 9. Means and standard deviations of the symptom sum scale and the percentage distribution of perceived health status according to occupation.

Occupational group	Symptom sum scale		Perceived health status		
	Mean	SD	Good or excellent (%)	Satisfactory (%)	Poor (%)
Administrators	51.4	8.9	45	50	5
Principal guards	53.4	9.7	34	49	17
Senior guards }	51.9	9.6	22	67	11
Junior guards }			55	45	0
Clerical staff	49.9	9.9	44	49	7
Foremen	49.6	8.4	34	56	11
Educational and nursing staff	48.9	8.4	49	45	6
All	51.2	9.3	32	58	10

stress symptoms were accentuated. The relatively good health status of the junior guards can probably be explained by their younger mean age (42 a).

The indicators of social activeness reflected differences between the occupational groups. The differences were however smaller than those of the symptoms and health disturbances and could only be considered as tendencies.

The distribution of the health indicators by age groups was restricted by the fact that a large majority of the participants in this study represented middle-aged people.

Health problems were the most common among those employees 45—55 a of age (fig 14). Both their younger colleagues and the oldest age groups (60 a and older) had a relatively good health status. The least healthy of the oldest age groups had probably already been pensioned because of disability. Another reason was that staff members of the oldest age groups can be found only in certain occupations; in the guarding occupations the normal age of retirement is 58 a. As the guarding staff was the least healthy, its absence from the oldest groups probably had a significant effect on the trend of the health-age curve.

It was possible to evaluate the relationship between the length of service and the health indicators, to some extent, independently of age, as the study groups comprised mainly the older age groups. The health problems increased with increasing length of service (fig 15). The relation was not, however, linear. For example the diastolic blood pressure was lower among the employees who had worked in prison service 10—14 a than among those who had worked in the field for a shorter or a longer period of time. The same kind of trend was found in the perceived status of health.

Self concept

The personality characteristics assessed through the self-concept test taken by the subjects of the present study have already been reported in detail (242). In the present communication only a brief summary is presented of the results which show the strongest deviations from the medium category of the scales constructed on the

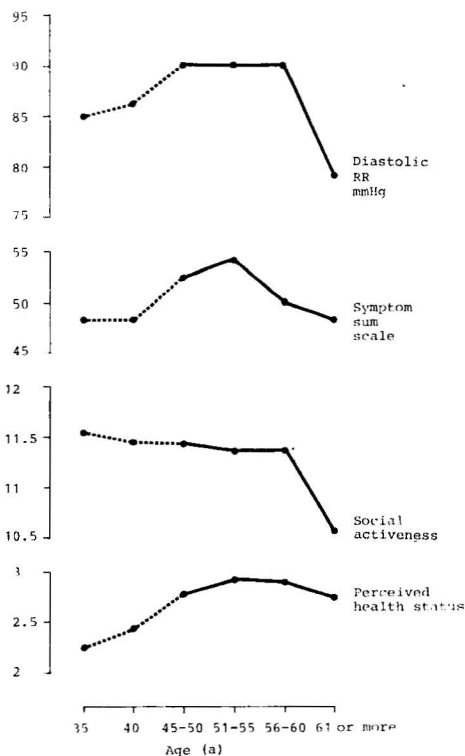


Fig 14. Stress and health indicators by age. (RR = blood pressure)

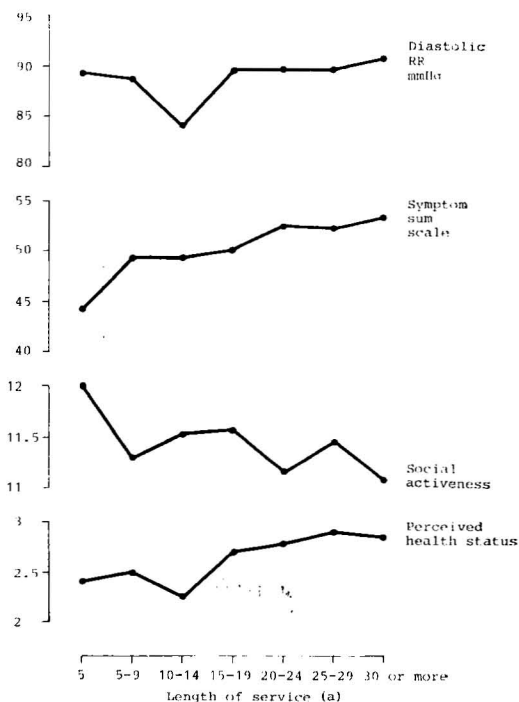


Fig 15. Stress and health indicators by length of service. (RR = blood pressure)

basis of the semantic differential technique.

The prison personnel as a whole perceived themselves as quiet and calm rather than as enthusiastic and lively and as more common than original. They preferred a steady, secure life to change and excitement and felt themselves to be in control, even in difficult situations, rather than as easily losing control. Strong-willedness in contrast to weak-willedness and steady nerves in contrast to sensitive nerves were also their perceived qualities. Responsibilities were taken seriously. Jealousy was not perceived as a characteristic feature. The intelligence level was considered average and more practically than theoretically oriented. In social relations extroversion was more typical than introversion.

Occupational differences in the profiles of the self concept were statistically significant. Those closest to each other were the profiles of the principal guards, the administrators, and the foremen. The profiles of the educational and nursing staff, clerical staff, and junior guards differed considerably, both from each other and from the other groups.

The educational and nursing staff differed the most from the other groups with respect to the self-concept profiles, especially on the basis of their relatively high self-esteem. Remarkable differences were found between the profiles of the junior and the senior guards. There were differences also between the male clerical staff and the other men in the sample. The clerical staff, as the group including the largest proportion of females, differed from the others primarily by their stronger tendency to submit rather than dominate.

DATA REDUCTION

Work characteristics

To reduce the data describing work characteristics and to determine their basic dimensions, a factor analysis was carried out on the basis of the intercorrelations (appendix II, table 1) of the work characteristics.

A five-factor solution was chosen as final on the basis of the criteria described

in the presentation of the statistical techniques (part V). The rotated factors were based on a varimax rotation with orthogonal factors. Only variables with a loading of 0.40 or higher are reported in this section. The total rotated factor matrix is presented in appendix II, table 2.

The first factor covered variables describing relations with prisoners, especially problems with them and perceived insecurity.

Factor I Problems with prisoners

<i>Variable</i>	<i>Loading</i>
73 Hostility from prisoners	0.67
60 Trouble with prisoners	0.65
69 Responding to different prisoners (problematic)	0.61
75 Contact difficulties with prisoners	0.57
74 Unreliability of prisoners	0.55
65 Difficulties with discipline	0.52
68 Alertness at work	0.51
59 Distrust from prisoners	0.50
56 Poor employee-prisoner relations	0.50
63 Insecurity	0.46

Factor II covered variables describing various aspects typically belonging to the so-called organizational climate, ie, information, feedback, decision making, recognition, etc.

Factor II Organizational climate

<i>Variable</i>	<i>Loading</i>
43 Information about changes	0.69
41 Correction of grievances	0.69
44 Participation in decision making	0.62
42 Feedback	0.62
50 Work arrangement (general)	0.57
58 Recognition	0.55
91 Administration's attitude towards well-being of staff	0.52
46 Information about shifts	0.51
52 Influence on work arrangement	0.50
45 Information about prisoners	0.50
57 Tolerance of deviating opinions	0.49
51 Work arrangement (own)	0.48
83 Appreciation by institution	0.45
49 Administrators' knowledge of practice	0.41
87 Further education	0.40

Factor III covered variables describing the variability of work content, challenge of work, and appreciation of work.

Factor III Work variability and challenge

<i>Variable</i>	<i>Loading</i>
36 Work versatility	0.66
40 Work variability	0.63
89 Challenge	0.54