# The Realization of Family Planning in Finland

With Particular Reference to Development in the 1970's

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#### The Finnish Fertility Survey in 1977

This paper is based on the Finnish Fertility Survey (FFS) which was started in 1976 as a part of the World Fertility Survey (WFS).

The basis of the sample was all Finnish women aged 18—44 years and in their first marriage. A random sample of 6 200 women was drawn from the population register of the whole country. The basic population of the sample was 571 840 women.

In examining the original sample it was found that 161 women were no longer part of the population mainly because of changes in their marital status. In addition, the addresses of 38 women were unknown. Thus the final sample was composed of 6 001 women. For various reasons 566 women could not be interviewed. Therefore the final number of the individuals belonging to the study was 5 449; the percentage of the sample loss was 9.4. The WFS is a comparative, statistical study without any perceptible theoretical basis. The FFS is founded on certain theoretical viewpoints, mainly on a need-theory approach. Need-theory is, however, a general frame of reference rather than a strict theory with clear-cut hypotheses. We can say also that the welfare approach of the study is operationalized through need-theory: the level of need-statisfaction is assumed to reflect the level of welfare.

#### Family planning goals

The generally accepted goal of family planning in Finland is that every child should be born as wanted child and at a convenient time for the parents. Efforts are being made to prevent unintentional and premature pregnancies by increasing knowledge about reliable methods of contraception and by increasing their use. Abortion and sterilization are not considered primary methods

in family planning; they should be resorted to only when preventive methods have failed. Intervention by public authorities is not deemed desirable, and parents, especially mothers, should be free to decide how many children they want and when it is convenient to have them.

In contemporary Finland the number of children per thousand inhabitants is 13.5 and the average number of children per family is 1.6, which certainly implies conscious regulation of family size. However, a low birth rate, alone is not, an indicator of well-carried-out family planning. In addition, it should be ascertained whether the children are desired and born at a convenient time.

In this paper the realization of the goals of family planning in Finland of the 1970's will be examined by comparing the findings of the FFS with a study made six years earlier. In 1971 about 2 200 men and women all over Finland, aged 18 to 54 and of all marital statuses, were interviewed in connection with a research project carried out by Sievers, Koskelainen and Leppo (1974) on health, ways of life and human relations. As the data of the two studies differ slightly, it is not possible here to always compare totally homogenous population groups. However, the main characteristics of the development perceptible in family planning in the 1970's can be demonstrated.

The realization of the goals of family planning in the 1970's will be examined by illuminating development in the methods of family planning during this period. First, attention will be paid to the increase in knowledge of contraception and to changes in the use of contraceptives. Secondly, we will examine whether the consultation and guidance carried out in Finland during this six-year-period have brought about any improvement in the age groups where family planning has proved least successful. Then will follow an examination of whether we are closer today to the main goal of family planning — which is to give birth to a desired child at a convenient time — than at the beginning of the 1970's and whether there has been improvement especially in age groups in which most of the undesired pregnancies have occurred earlier. Attention will also be paid to changes in the spacing of births. Finally we will examine whether expectations and the ideal number of children have varied in the 1970's and whether today's parents achieve their goal regarding the ideal number of children more often than at the beginning of the 1970's.

## Methods of family planning Knowledge of contraception

Knowledge of contraception in Finland was found fairly good already in the data collected in 1971, as only 3 % of married women were not able to mention any method of contraception. During the following six years knowledge increased. In 1977 only  $0.2\,$  % of women in their first marriage were unable to mention any method of contraception.

The increase in knowledge of contraception in the 1970's is shown most clearly by the fact that reliable methods are now better known and knowledge of unreliable methods has decreased. In 1977 95 %0 were familiar with the pill and more than 90 %0 of the married women knew the condom and the IUD. Compared with 1971 the proportion aware of the withdrawal method had diminished from 50 %0 to 30 %0. Knowledge of the rhythm method had also diminished, from 32 %0 to 21 %0.

During the past six years the differences between population groups have diminished. In 1971 the IUD was familiar only to 59  $^{0}/_{0}$  of those who had had 0—8 years of school education and to 90  $^{0}/_{0}$  of those who had had at least 12 years of schooling. In 1977 the IUD was familiar to 90  $^{0}/_{0}$  of those who had gone only to elementary school and to 96  $^{0}/_{0}$  of those who had an academic degree. For the condom knowledge varied from 91  $^{0}/_{0}$  to 97  $^{0}/_{0}$ .

Some differences still remain between various population groups, but they are markedly smaller than in 1971. In general the highly educated were better aware of each particular method of contraception than the less educated. The young were better informed on contraception than the old. They knew reliable methods better and were less familiar with unreliable methods than older age groups.

The fairly small differences existing today between population groups were also observed when the data collected in 1977 were clustered into nine groups by means of grouping analysis using variables which show the level of needsatisfaction (cf. Appendix 1). In this analysis existed no considerable variations between these groups regarding knowledge of reliable methods. The group in which economic situation, social linkages and possibilities for self-actualization were good, was not more familiar with the IUD or the pill than those in a less well-off group. On the contrary the deprived groups seemed to be slightly better informed. Furthermore, those living in better social conditions were somewhat more aware of unreliable methods. There are at least two alternative interpretations here. On the one hand, we can suppose that people living in good circumstances have better knowledge of unreliable methods in order to evade them. On the other hand, it can be maintained that the general knowledge of persons in poorer life circumstances better serves the purpose of contraception. This interpretation, however, does not sound plausible because of the other facts we know about these people. It is likely e.g. that less educated people are more unwilling to talk about withdrawal than more educated people.

### Practice of contraception

A good knowledge of contraception is a prerequisite for the use of contraception, although it does not alone provide a sufficient guarantee of successful

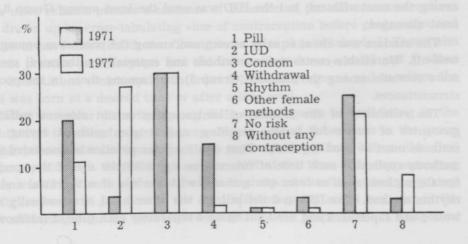
family planning. The method of contraception must be reliable and used regularly.

The development in the use of contraception by Finnish women in the 1970's is illustrated by comparing the current use of contraception of women who were interviewed in 1971 and in 1977. It gives information of the use of contraception in terms of its need and is therefore a better measure than the life-long use of contraception.

Sievers et. al. (1974) have pointed out that the use of the methods of contraception by Finns at the beginning of the 1970's did not correspond with the knowledge of them. Especially the reliability of the methods used left a great deal to be desired. The condom, pill and withdrawal were the three most common methods of contraception.

During the past six years a slight improvement has occurred in the use of contraception. Women have clearly begun to use reliable methods of contraception. The IUD, which in 1971 was still mainly a method of the upperclass, has become a common method, and is almost as popular as the condom. The popularity of pill, however, has dropped strongly (Figure 1). Withdrawal which was the third most popular in 1971, is no longer a significant method of contraception. Sievers et. al. predicted that this would take place in the future among the young. The speed of development seems to be so rapid, that it becomes questionable whether the data are entirely comparable. In the 1971 study withdrawal was considered to be underrepresented in the interview situation. In the 1971 study the question on the use of contraception was given in writing and the alternative answers were listed under the questions, but in the 1977 survey the interviewer posed the same question without mentioning the alternative answers. Thus it is possible that the proportion of the users of withdrawal stayed somewhat too low in the latter study.

Figure 1. Currently used contraceptive methods of married women aged 18—44, in 1971 and 1977.



In the past six years some stagnation has also occurred in the use of contraception: The proportion of women who are in need of contraception but do not use it, has increased from 3 % to 8 %. It is difficult to say to what extent this has been influenced by the fact that in 1971 women were not considered susceptible to the risk of conception if they had not had sexual intercourse in the past month. If the trend has been negative, it is possibly due to the freer abortion law passed in 1970, whose impact was not yet felt in the data collected in 1971.

Comparison by age groups of the current use of contraception shows that the condom is the most common method of contraception among under 30-year-olds as well as among older women. However, its use has no longer increased in the 1970's. Instead the IUD has become more common among women of all ages, although it is somewhat more common among over 30-year-olds. The pill is a method used by young women. However, its popularity has diminished considerably during the past six years also among the young.

At the beginning of the 1970's withdrawal was primarily a method used by older women, but at present its significance is so small that even among over 30-year-olds it is practised by only  $2\ ^0/o$ . It was observed that the proportion of women who did not use contraception increased in the 1970's; this augmentation has taken place mainly among older women. It is possible that this augmentation was not caused by abortions, but rather by the fact that there was a larger number of over 30-year-olds who had not had sexual intercourse during the past month. In the 1977 data this fact was not taken into account when determining the risk level of pregnancy.

Among the nine different categories of well-being mentioned in the section on knowledge of contraception clear-cut differences were observed, for example, in the number of children. However, surprisingly little differences were found between these groups in their use of contraceptives (Table 1).

The fewest number of pill users were in the most affluent group, Group 4, but then again in the least affluent group the pill was not the most used method. The use of the IUD was more common among the least affluent than among the most affluent, but the IUD was used the least among Group 8, the most alienated.

The condom was about equally as common among the poorest as among the well-off. Unreliable contraceptive methods and especially withdrawal seemed more common among the affluent (Group 5) than among those in the poorest circumstances.

The reliability of the method of contraception is not alone a sufficient guarantee of successful family planning, and it goes without saying that methods must be used regularly. First of all regular practice is associated with methods applicable each time of intercourse e.g. with the use of the condom, female methods such as foam etc. and also with the use of withdrawal and the rhythm method. The IUD and the pill, on the other hand, are medically controlled and supervised and need not be used separately each time of intercourse.

Table 1. The use of contraceptive methods by different categories of well-being in 1977.

	Contraceptive methods used									
Welfare- category group	Used none	Pill	IUD	Condom	Female meth- ods	With- drawal	Rhythm	Absti- nence	Total	N
dans be	21.5	11.9	28.3	34.2	0.7	2.2	0.9	0.2	100	990
2	26.7	11.8	28.8	29.8	0.4	1.8	0.4	0.2	100	490
3	21.8	11.6	30.6	32.6	0.5	2.3	0.3	0.3	100	614
4	30.9	9.3	26.5	28.7	2.0	2.0	0.2	0.5	100	411
5	25.5	12.9	27.9	27.6	2.0	4.1	DIOL SO	- Maid	100	294
6	25.5	12.9	25.1	33.5	1.4	1.4	0.2	Seems la	100	510
7 11 10 10 1	23.6	11.4	31.4	28.7	1.0	2.1	1.7	50000	100	516
8	30.0	9.5	24.5	32.7	0.9	2.0	0.3	0.2	100	654
9	27.5	10.7	27.8	30.3	1.1	0.8	1.7	0.2	100	661
m-4-1	95.5	11 2	27.0	31.5	1.0	2.0	0.7	0.2	100	5140

At the beginning of the 1970's 83 % of married women aged 18—44 were regularly practising contraception. The rest have failed to use contraception once or several times. As the regularity of practice was not an object of inquiry in the study carried out in 1977, this problem must be clarified by other means.

At first it must be noted that among women who did not desire more children in the future, as high a percentage as 12 % did not use any method at all. In short they totally neglected contraception. In addition, a great number of women had become pregnant while using contraception, which does not always indicate the unreliability of the method, but irregularity in its use. In spite of contraception 9 % had become pregnant with their first child, 10 % with their second child, 16 % with their third child and 20 % with their fourth.

As there are only slight differences in the use of contraceptives among categories differing in their well-being the question arises whether the use of contraceptive methods is a valid measure of having children. In order to get a more reliable picture a measure of intention of the use of contraceptives was drawn up by cross-tabulating »use of contraception before pregnancy» and »desire to have more children». Two groups were thus obtained: 1) Those who did not practise contraception and did not want to have a child and 2) those who discontinued contraception in order to become pregnant and to whom the child was born at a desired time or after a long wait.

There was clear disparity among different categories of well-being in the intention of the use of contraceptives. 35 per cent of the women in the group in the poorest circumstances had not used contraceptives before the first pregnancy although they did not want a child at the time. The corresponding figure was 19 per cent in the most affluent group. As to the second pregnancy the figures were 24 per cent in the least affluent group and 4 per cent in the most affluent group. As to the third pregnancy the proportion not using con-

traceptives varied from 10 per cent in the highest category of well-being to 48 per cent in the lowest. As to the fourth pregnancy the cases were so few that in the most affluent group there were no persons not using contraception, in the least affluent group 52 per cent did not use contraception.

When pregnancy in the case that contraception had been used was cross-tabulated with the practised method, it was evident that conception had taken place mostly if an unreliable method or methods which need to be used each time of intercourse had been practised. Regularity in the use of contraception affects primarily the protection given by the condom and some female methods. When examining the use of contraception in regard to the first four pregnancies, it is noted that 7~% of those who had used the pill or an IUD had become pregnant, as compared to the condom and female methods where the corresponding percentage was 38~% and to withdrawal and the rhythm method where it was 56~%.

The high percentage of pregnancies for the reliable methods, the pill and the IUD, depends fully on the fact that conception occurred during the use of the IUD. When the pill was used conception resulted only for 0.6 % of the women and for the IUD the corresponding figure was 20 %. This figure has been heavily influenced by the fact that the number of those using the IUD was rather small in the data. As the IUD has not been generally accepted until the 1970's, it has been used more often only in the last few years. The unreliability of the above mentioned figure is also influenced by the brevity of the period of usage of this method, sometimes only a month or two. Obviously some other method had generally been used for contraception which had only recently been exchanged for the IUD, and some potential risks might have occurred in connection with the exchange.

#### Undesired childbirth (pregnancy) and inconvenient timing

The knowledge of contraception among Finnish women has increased in the 1970's and obvious improvement has taken place also in their use, so far as the reliable methods of contraception have become more general, while the frequency of unreliable methods has lowered. The prevailing tendency seems to lead to better attainment of family planning. Is this really the case in Finland?

It is rather difficult to find a definitive answer to this question through the results of the fertility surveys, as they are not adequately comparable by data in order to ascertain this.

In 1971 the interviewees were asked about all of their pregnancies, whether each one had occurred after a long wait, at the desired time, earlier than desired or when it was not desired at all. In the 1977 study the degree of desirability was inquired after only in relation to the first four pregnancies ending in childbirth.

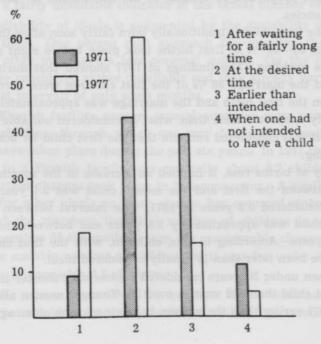
The comparison becomes more complicated, because short-duration pregnancies, abortions and miscarriages were not taken into account in 1977 for the first four pregnancies. Also the interview situation differed in these studies so far as in 1971 the respondents gave answers in writing to the questions on the desirability of pregnancy, while in 1977 the interviewer posed the same questions orally. It is not easy to say to what extent the opinions vary from the interview situation to the situation where individuals respond in writing without interviewer seeing the answers.

The data collected in 1971 showed that of the first four pregnancies of women aged 18—54 years 10  $^{0}$ /<sub>0</sub> were undesired and 38  $^{0}$ /<sub>0</sub> had begun earlier than intended. After six years the findings are similar: 10  $^{0}$ /<sub>0</sub> of the first four pregnancies ending in childbirth of women aged 18—44 years were undesired. However, the percentage that had begun too early was only 27  $^{0}$ /<sub>0</sub>.

However, this comparison does not illustrate the development of the 1970's, as a large share of children were born before the time concerned. Therefore it is well-founded to examine the desirability of births occurring in the years 1972—1977. Only thus can the effects of the improved knowledge of contraception and the progress perceptible in the use of the methods of contraception be ascertained.

The increase in knowledge of contraception and of the spread of reliable methods of contraception led to distinctly better spacing of births in 1972—1977. The majority of these children were born as wanted children, only 6  $^{0}/_{0}$  of the first four pregnancies were undesired (Figure 2).

Figure 2. The desirability of the first four births at the time of conception in 1971 and 1977.



At the beginning of the 1970's the majority of pregnancies which had begun undesired was found in groups which can be characterized as follows: older, married for a longer time, less educated, those having a small income, working class or farming population and those living in rural provinces outside Southern Finland. In the categories related to age and to the age of the marriage, variations were 8—9 percentage points in other categories 4—5 percentage points.

In 1977 variations appeared in different population groups as to the desirability of pregnancies. The findings of the grouping analysis, showed distinctive deviations particularly between the most well-to-do and the poorest groups. The most well-to-do, who also had the smallest number of children, made up only 7 % of the unwanted pregnancies. Among the most deprived the corresponding figure was 17 %. Similarly inconvenient timing was more usual in the poorest group than in the most affluent group.

#### Spacing of births

Birth intervals are closely related to the timing of births. One of the main goals in family planning is that pregnancies should be timed so as to avoid the risks of too close pregnancies, which might have a negative effect on the health of the mother and the child and consequently the welfare of the whole family.

As the tendency during recent years in Finland as in other developed countries has in any case been to have only two children in the family and that families with three or more children are rare, this does not bring about a great problem. A small proportion of women, at the most, come to suffer from too frequent pregnancies.

In Finland the first child is traditionally born fairly soon after the marriage. In general about 35-40 % of first births took place before eight months had passed from the wedding. The findings of 1977 showed that during the first seven months of the marriage 38 % of the first children were born. Thus the interval between the first birth and the marriage was approximately 1.3 years. This is distinctly a shorter time than what is considered suitable among the Finns. In 1971 it was considered suitable that the first child be born 2.2 years after the wedding.

As the parity of births rose, it implied an increase in the spacing of births. The interval between the first and the second child was 3.1 years, although the ideal was considered 2.3 years in 1971. The interval between the second and the third child was approximately 3.6 years and between the third and the fourth 3.5 years. According to this, children, with the first child making an exception, are born later than is usually considered ideal.

In 1971 women under 30 years considered a somewhat shorter time ideal in spacing the first child than did women over 30. Younger women also had their first child in 1977 earlier than the women belonging to the older age group.

women in these groups were best able to change their ideals to match reality. On the other hand, women in both the least affluent and the most affluent groups had ideals furthest from reality. The actual number of children clearly exceeded the ideal number among those in the poorest circumstances and among

The spacing of births is studied according to desirability and according to parity in figure 3. The findings of this study reveal distinctly that pregnancies which started earlier than intended were, in general, noticeably below the mean spacing of births and also lower than what was considered ideal in 1971. Those born at the desired time followed the average and those born after a long wait were spaced considerably further apart than the average. The pregnancies that were not at all desired when they started were, when the first pregnancy was in question, spaced distinctly earlier than the average, but the undesired second pregnancies already neared the mean spacing and the third and the fourth pregnancies came to the average.

#### Realization of ideal family size

The realization of aims set for family size is indicated by the correspondence of the number of children and their desirability. The most ideal would of course be that the reality and the ideal would be in harmony. Opinions on the reliability of the use of ideals as prejudgements of actual family size are heterogenous and in several studies their use as an indicator of final family size has been critized heavily. It is felt that life experiences have an influence on ideals and thus for instance the ideal family size at the beginning of the marriage is a fairly unreliable indicator of the actual number of children.

The unreliability of ideals is augmented by the variability of people's conception on them. One person may approach the question through his own family, the other may have a less personal outlook. On the individual level the ideals are considered rather unreliable and they already vary in interviews carried out at intervals of only some months.

In both Finnish fertility surveys several questions were posed on the ideal number of children, through which one may follow the possible changes of ideals that have taken place during the past six years. In 1971 the ideal number of children in a Finnish family was generally about 2.7 children and in the 1970's no further changes took place in this connection. A similar ideal is still prevalent. For other ideals no great change has occurred since either. At the beginning of the marriage the ideal number of children is usually 2.3—2.4 children regardless of the mother's age. No considerable changes had occurred either in the suitable number of children, as it was for under 30-year-olds 1.9 and for over 30-year-olds 2.3 children.

In 1977 the women were asked the question: If you were now in a position to choose, what would be the exact number of children you would like to have?

The mean number of children thus obtained was 2.4 children. The ideal varied by population groups.

The older women considered as ideal a larger family than the young, as did those who had been married longer as compared to those who had been married a shorter time. The variations by population groups were quite heterogenous. When the current ideal number of children was examined in nine categories of different well-being groups, the variation of the ideal number of children was from 2.3 (groups 7 and 8) to 2.7 children (Group 5).

The differences were greater when persons were asked what was a suitable number of children in regard to the family's income and expenses. Here the mean ideal number of children was smaller, 2.1 children, and variations by population groups were large. In Group two the ideal was the lowest, 1.7 children, and in Group 4 the highest, 2.5 children. This implies that the economic situation of the family had been of main interest and the ideal was not affected by any illusory factors.

The ideals of the number of children in Finnish families have changed only slightly in the 1970's. The ideal number of children is larger than the number thought suitable or desirable in families. During these six years have reality and the ideal number of children come closer to each other compared to the situation at the beginning of the 1970's. In 1971 in the oldest age group, the 45—54-year-olds, the final number of children was 3.1, the suitable number 2.5 and the general ideal number of children 3.0.

In 1977 in the oldest age group, the 40—44-year-olds, the final number of children was approximately 2.7, the general ideal number of children was 2.7 and the suitable number 2.4 children. Deviations have thus become smaller between the ideals and the expected number of children in the 1970's.

If we assume that the current ideal number of children best represents the family size ideal by individual women and look how it corresponded to the final (current) number of children in the oldest age group, women aged 40—44, clear-cut differences between population groups are evident. The first, sixth and seventh category of well-being had reached their ideal in their final number of children. Their family size ideal and reality were the same or the the affluent the actual number of children was definitely below the ideal.

#### APPENDIX

#### On the grouping analysis

The grouping was carried out on the basis of eighteen variables using the grouping-analysis programme of the Computer Center of the University of Helsinki. Because the maximum number of individuals with 18 variables which

can be handled in this programme is 550 and our material comprised 5449 individuals we had to take a sample of 550 individuals, or about ten percent.

Solutions with group-numbers ranging from three to ten were tried out. The theoretical plausibility of the solutions was clarified by discriminant analysis. It turned out that certain solutions were more capable than others of producing dimensions relevant to the need-theory approach. The solution finally selected was that of having nine groups.

The grouping of the whole material of 5 449 individuals was carried out by classifying the material on the basis of the discriminant functions of nine groups of the sample. In the discriminant analysis the covariance matrices of the groups were assumed to be identical.

The examination of the discriminant functions shows that the first function discriminates on a very general level between the well-to-do and the deprived. The first function produces a dimension of welfare which combines the satisfaction of existence needs, relatedness needs and self-actualization needs. The second function deals mainly with relatedness needs and discriminates between persons who have good relations with their friends as well as affectionate relations with other members of the family and those who have a less fortunate lot in these respects. The third function reflects variations of safety and security. There are two important variables in this function: \*\* the insecurity of subsistence\*\* and \*\* alienation\*\*. This function indicates that there may be a partly independent need-dimension: safety. These discriminant functions I—III are the most important ones and therefore we do not touch upon the functions IV—VIII in this paper.

The examination of discriminant functions reveals the pluralistic character of the society: there are several styles and ways of life, and people combine various aspects of welfare in various ways. In this short paper we cannot analyse the discriminant functions more in detail. Instead we will present a concise characterization of the groups.

Group 1. The individuals of this group feel themselves, on the average, less alienated and safer than the rest of the sample. Nevertheless, it is located clearly below the average in the first function which indicates general welfare.

*Group* 2. This is by far the most poorly lotted group according to the first discriminant function. In keeping with their general statistical location, the individuals of the group are poorly lotted in housing and also their growth needs are poorly satisfied. In addition to that, the satisfaction of their relatedness-needs is below average.

Group 3. This is a relatively well-to-do group, the members of which feel themselves safe, and not alienated. On the other hand, their social relationships are rather poor. They are characterized also as having a high housing-level.

Group 4. These people are designated by the first discriminant function as by far the most fortunate group. They feel themselves exceptionally safe and non-alienated and their growth-needs are more perfectly satisfied than those

of the other groups. The individuals of the group are quite fortunate also in their social relationships.

*Group* 5. The most conspicuous feature of this group is intensive participation in clubs and associations. The group is composed of relatively well-to-do people having many close friends and good social relationships.

Group 6. These people are characterized by two divergent factors: on the one hand many close friends and on the other hand a high level of alienation together with a feeling of insecurity. They are located somewhat below the average in the function indicating general welfare, but have indicated low satisfaction with the size of their dwellings.

*Group* 7. The position of this group is next to the worst as located in the function of general welfare. In addition, its position is by far the poorest in the function of social relations.

Group 8. This is quite an alienated group. The growth-needs of its members are poorly satisfied in terms of educational esteem and self-actualization in work. In the function of general welfare the group has an average location.

Group 9. The position of these persons is the second best in the function of general welfare. Besides, they are fortunate in their social relationships.