

**Analysis of Quantitative Data
of the Prevention Program
of Hope and Homes for Children – Bulgaria
Implemented between October 2014 and March 2017**

Technical Report

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1. Purpose of the analysis

The report presents the analysis of the data collected in the course of the performance of the programs of Hope and Homes for Children - Bulgaria implemented between October 2014 and March 2017. The report was prepared within the framework of a program performance evaluation project implemented by the Know-How Centre for Alternative Care for Children at New Bulgarian University.

The purpose of the analysis is to evaluate the performance efficiency of social workers implementing programs focused on assistance to families at risk so as to meet their needs and prevent them from abandoning their children in institutions.

The data needed to evaluate social worker performance efficiency were collected in three short periods of time: (1) prior to the intervention (initial assessment); (2) immediately after the intervention (after the finalization of support), and (3) six months after the work with the children and families was finalized.

2. Tools. Data Structure

The data were collected through specialised tools developed in accordance with the research design: Synthesized Form for Children Growing in Family Environment. The form contains six groups of child assessment indicators:

1. Living conditions – 9 indicators
2. Family and social relations – 7 indicators
3. Behaviour – 12 indicators
4. Physical and mental health – 8 indicators
5. Education – 7 indicators
6. Employment and household economy - 5 *indicators*

Depending on its nature, each group contains a different number of indicators – between 5 (for group 6. Employment and household) and 12 indicators (group 3. Behaviour).

Each group of indicators is used to assess a specific segment of the welfare of the family and the child within the family. Monitoring is based on indicators of the risk of abandonment of a child. Each risk factor is matched with a corresponding protection factor and these pairings are expressed like antonyms. For example: "Absent or insufficiently strong emotional bond between the mother and the child (Group 2 risk factor: family and social relations, and its mirror indicator: "a strong bond between the mother and the child" (protective factor in the same group). In their turn, the different indicators refer to specific aspects of the family capability to provide optimal living conditions to their child through satisfaction of his / her needs.

Each child that was subject to monitoring on three occasions using the same risk / protection indicators (in each of the monitoring periods) The assessments on each indicator are dichotomous (availability/absence).

During each of the three phases, in addition to the assessment based on individual factors, there was a "yes / no" assessment relating to each group of indicators referring to whether or not the child's needs were fully satisfied.

The evaluation form for each child has a special focus on measuring progress in family progress because, during each of the three monitoring periods, within each range of welfare segments, the level of change was evaluated based on the following 5-grade scale: 1 – none; 2 – weak; 3 – moderate; 4 – nearly; 5 – completely.

Along with the indicators described above, the Synthesized Child Assessment Form contains a broad demographic block of detailed information on the children monitored and their families. The next section of the report presents their summarized demographic profile.

3. Demographic profile of the children and their families

The total number of children covered by the research is 108; their families live in 15 locations across the country, including Silistra, Tutrakan, Dulovo, Alfatar, Sofia, Pirdop, Vetren Village in Pazardzhik Region, Pleven, etc. Of the total, 58 (53,70%) are boys and 50 (46.30%) were girls. .Ages varied between 0 (newborn) and 36 months; the average age is $M=9.42$ months ($SD=9.75$). The following table shows the frequency distribution of the children's age grouped in intervals of 6 months for sake of clarity.

Table1. Frequency distribution of the children by age (at intervals of 6 months)

Age (in months)		Frequency table: Age/date of birth of the child – in month (Evaluation table HHC – amended.sta) Include condition: v2='prevention'			
From	To	Count	Cumulative Count	Percent of Valid	Cumulative Percent
0<=x<	6	54	54	50.00	50.00
6<=x<	12	13	67	12.04	62.04
12<=x<	18	20	87	18.52	80.56
18<=x<	24	6	93	5.56	86.11
24<=x<	30	12	105	11.11	97.22
30<=x<	36	2	107	1.85	99.07
36<=x<	42	1	108	0.93	100.00
		0	108	0.00	100.00

The data show that most of the children in the sample were in younger age groups. The group with most children covers the age range 0-6 months. It contains 54 children or 50% of the total.

This shows that in this program, the focus of social workers is prevention of abandonment and institutionalization of children in the lower age groups.

The large majority of families under assessment included both parents (80 of the families or 74% of the total). The remaining 28 (26%) were single-parent families – lone mothers.

The age of the mothers varies from 14 to 48; their average age is $M=28.83$ ($SD=8.93$). The table below shows the frequency distribution of the mothers' age, at intervals of 5 years.

Table 2. Frequency distribution of the mothers by age (at intervals of 5 years)

Age (in years)		Frequency table: Age/date of birth of the caretaker (1) - in years (Evaluation table HHC - amended.sta) K-S d=.10061, p> .20; Lilliefors p<.05 Include condition: v2='prevention'					
From	To	Count	Cumulative Count	Percent of Valid	Cumul % of Valid	% of all Cases	Cumulative of All
10<=x<	15	3	3	2.91	2.91	2.78	2.78
15<=x<	20	24	27	23.30	26.21	22.22	25.00
20<=x<	25	13	40	12.62	38.83	12.04	37.04
25<=x<	30	13	53	12.62	51.46	12.04	49.07
30<=x<	35	24	77	23.30	74.76	22.22	71.30
35<=x<	40	15	92	14.56	89.32	13.89	85.19
40<=x<	45	8	100	7.77	97.09	7.41	92.59
45<=x<	50	3	103	2.91	100.00	2.78	95.37
		5	108	4.85		4.63	100.00

Most of the mothers are at the age of 15 to 40. Just 3 of them (2.91% of the total) are under 15; the number of mothers above the age of 40 is also relatively small.

The structure of the sub-sample related to employment experience is relatively simple

Table3. Employment status of mothers

Category	Frequency table: Caretaker's occupation/job (1) (Evaluation table HHC - amended.sta) Include condition: v2=prevention					
	Count	Cumulative Count	Percent of Valid	Cumul % of Valid	% of all Cases	Cumulative % of All
Maternity leave	45	45	41.67	41.67	41.67	41.67
Process engineer in a tailoring company	1	46	0.93	42.59	0.93	42.59
Unemployed	58	104	53.70	96.30	53.70	96.30
Works in a kindergarten	1	105	0.93	97.22	0.93	97.22
Serving a sentence in prison	1	106	0.93	98.15	0.93	98.15
Minor	1	107	0.93	99.07	0.93	99.07
Disabled on pension	1	108	0.93	100.00	0.93	100.00
	0	108	0.00		0.00	100.00

As the data in Table 3 show, the majority of mothers belong to two groups).45 (41.67% of the total) of the monitored cases are on maternity leave; 58 mothers (53.70% of the total) are unemployed. The rest include single cases of a mother in prison, an under-aged mother and a mother on disability pension. Only two of the mothers have real, remunerated employment. From this point of view, 98.15% of the mothers in are not on the labour market and do not receive employment remuneration.

The second sub-sample showing the families of the monitored children includes their fathers. As already mentioned, not all of the families (74,07% of the total) include the two parents. This means that size of the sub-sample that includes fathers is smaller compared to the one for mothers. As regards age, fathers are in the range of 17 to 63; the average age is $M=34.61$ ($SD=9.31$). The next table shows the frequency distribution of fathers' age, at intervals of 5 years.

Table4. Frequency distribution of the fathers by age (at intervals of 5 years)

Age (in years)		Frequency table: Caretaker's age/date of birth (2) - in years (Evaluation table HHC - amended.sta) K-S d=.10623, p> .20; Lilliefors p<.10 Include condition: v2=prevention					
From	To	Count	Cumulative Count	Percent of Valid	Cumul % of Valid	% of all Cases	Cumulative % of All
15<x<=20		5	5	7.81	7.81	4.63	4.63
20<x<=25		10	15	15.63	23.44	9.26	13.89
25<x<=30		3	18	4.69	28.13	2.78	16.67
30<x<=35		11	29	17.19	45.31	10.19	26.85
35<x<=40		23	52	35.94	81.25	21.30	48.15
40<x<=45		4	56	6.25	87.50	3.70	51.85
45<x<=50		7	63	10.94	98.44	6.48	58.33
50<x<=55		0	63	0.00	98.44	0.00	58.33
55<x<=60		0	63	0.00	98.44	0.00	58.33
60<x<=65		1	64	1.56	100.00	0.93	59.26
		44	108	68.75		40.74	100.00

Based on this indicator, the sub-sample of fathers is slightly more differentiated than the one for the mothers. However, the age distribution is highly comparable. The larger number of fathers are at the age of 20 to 40; 5 of them are under 20, and 12 are above 40. The age data cover 64 of the families in the research and there are no data for the remaining 44 families. With 34 of the families, the father is not member of the family and does not provide any care for the child; with the remaining 10, the child's father is not known.

Although smaller in number, the people covered in this sub-sample are employed in a larger variety of professional sectors. We should mention, however, that 52 of the fathers (54.17% of those, for whom data are available) are unemployed. This is nearly the same as the share of unemployed mothers. Of the rest, 8 are in places of detention, one is in a foreign country, and two are on disability pensions. Those with paid employment have manual work that demands few qualifications in the construction industry, agricultural sector and public cleaning. From this perspective, 82.50 % of the fathers in the sub-sample are not on the labour market and do not receive employment remuneration.

With regard to the marital status of the parents of the monitored children, the families fall mainly in two large groups. In the larger segment, the two parents are cohabitating but are not formally married. They total 83 families (65.87% of all). In the other 20 families (15.87%), the parents are separated. In one of the families the father is unknown, and only in 6 families (4.76%) the parents are officially married.

There are no data concerning the relations between the two parents for 14 of the families.

Most of children (69.04%) have at least one sibling and around half of them (48.40%) have two or more siblings. In general, the siblings are being raised in the biological family (85.23% of the first-born brothers/sisters and 80.65% of the second). There are rare cases of the siblings growing up in the extended family (respectively, 4.55% and 3.23%), in a foster family (2.27% и 1.61%), in a specialised institution (3.41% и 11.29%) or in a residential care (1.14% и 1.61%). It is worth mentioning that the number of the second-born siblings left in institutions is relatively high, and this could indicate a trend of the parents being more inclined to leave their second child in an institution.

4. Prevention activity efficiency analysis

The data collected during the program implementation have been analysed in succession, organized by spheres of welfare of the families and the children in them. The effectiveness of the social worker activities related to preventing children from being placed in specialised institutions is analysed in the framework of each sphere with regards to risk and protective factors, general satisfaction of the child's needs and the change in the corresponding welfare sphere that is expected to occur as an effect of the social worker activity.

The key analysis method used is dispersion analysis with repetitive measuring that enables monitoring of the progress in the level of the different indicator groups (welfare spheres) in each of the three periods of monitoring. The analyses are based on the synthesized evaluations that are the sum of the evaluations on each indicator.

4.1. Welfare sphere 1. Living conditions

4.1.1. Risk factors

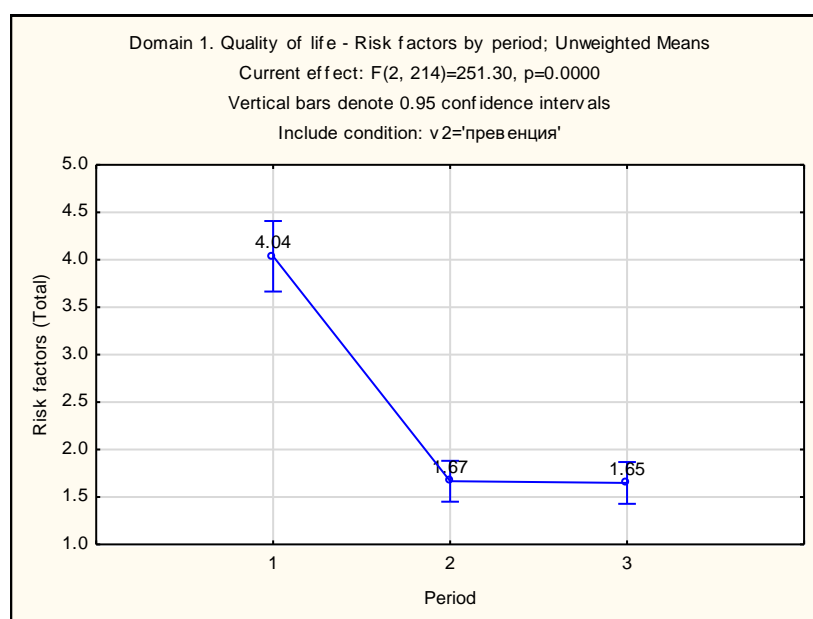
The factors in this welfare sphere that are evaluated in the Synthesized Form for Children as risk factors are related to the child being looked after by only one of the parents, living in poor conditions, having no access to basic public utility services, having a large number of siblings, having spent some time in an institution, or

having lived with another family.

The analysis results are illustrated on the next diagram where each of the points shows the common average level of risk factors in each of the monitoring periods.

The diagram shows that the level of risk changed significantly and the program progressed. This is reconfirmed by the test statistics $F(2, 214)=251.30, p=0.00$. In the initial monitoring period (prior to the intervention), the common average level of risk factors was 4.04, in the second period (right after the intervention), their level dropped down to 1.67 and stayed nearly steady in the third period (six months after the end of the support). It is worth mentioning that, in the very beginning when the activity performance started, the risk factors were at a moderately high level, which suggests the activities performed by the social workers created more favourable conditions for the child..

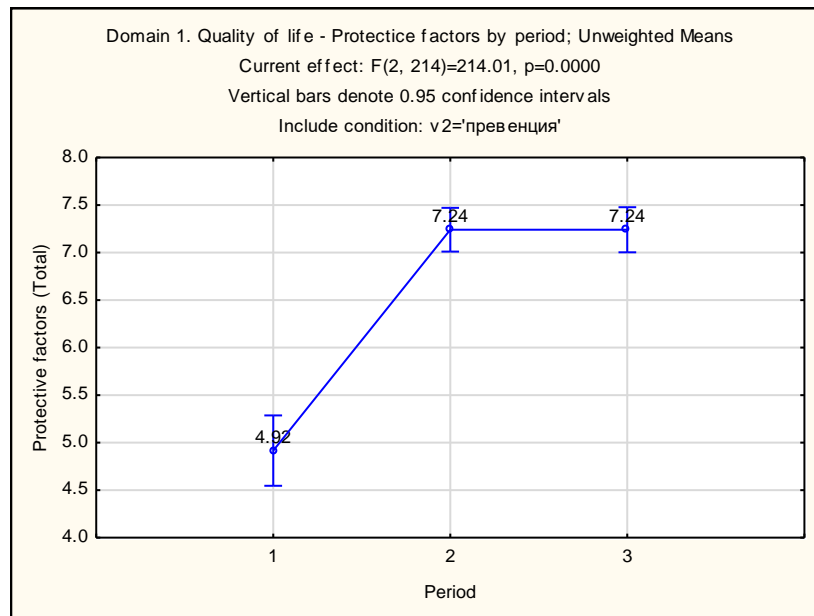
Figure1. Living conditions – risk factors



4.1.2. Protective factors

The overall level of protective factors, unlike the factors related to the risk of child abandonment, rose significantly while the program was in progress ($F(2, 214)=214.01, p=0.00$).

Figure 2. Living conditions – protective factors



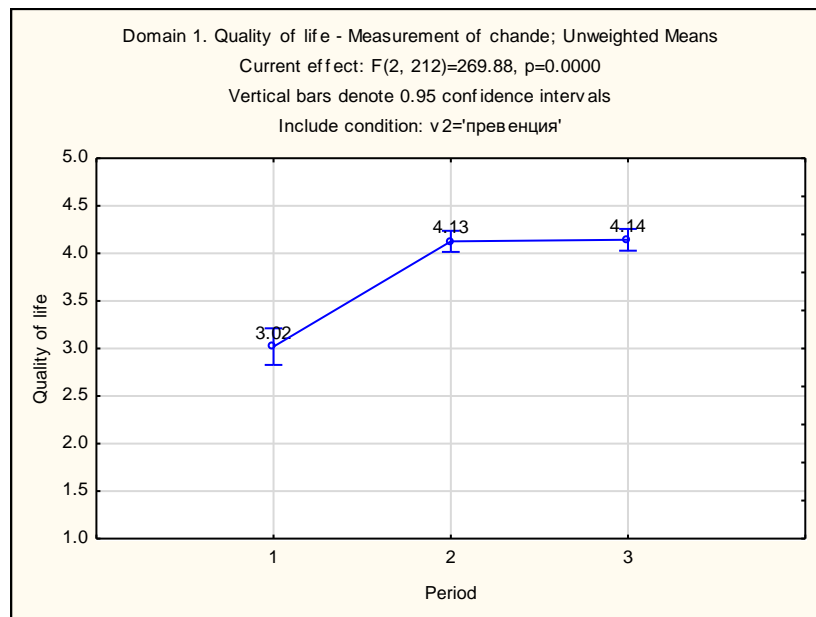
The initial common level of this factor group ($M=4.92$) was higher yet comparable to the risk factor level which indicates a certain balance between the different aspects of the living conditions of the children working in opposite ways. At the end of the intervention, the protective factors had reached a higher level ($M=7.24$) and the level of protective factors was virtually the same six months after the work with the children and their families ended.

A similar clear trend of improvement of the children's quality of life was also seen on the basis of the summarized evaluations of the satisfaction of children's needs. If the needs of 21.30% of the children were satisfied prior to the intervention, after its end the number of children had reached 100% and stayed like that after the 6-month period expired.

4.1.3 Change evaluation

The change evaluation has 5 indicators (with an option to add more) and can be seen as an extended form of summary of the quality of life of each child in the different monitoring periods and the change due to the social workers' intervention.

Figure3. Living conditions – measuring the change



The diagram above illustrates the results of the analysis and provides grounds to draw some important conclusions on social worker performance effectiveness. Although the initial level of that variable cannot be regarded as low (the average value in the beginning of the program was $M=3.02$), the social workers have managed to significantly improve the quality of life of the children covered by the program (with the second measuring of the change, after the end of the intervention, $M=4.13$). The second conclusion is that their work has a long-lasting effect because 6 months after the their activity had ended, the children's quality of life kept its level ($M=4.14$).

4.2. Welfare sphere 2. Family and social relations

4.2.1. Risk factors

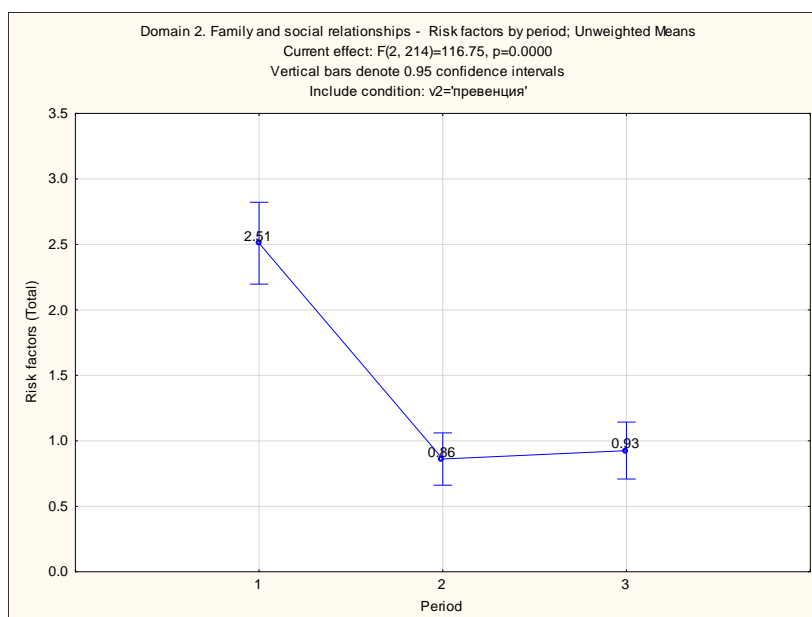
In this welfare sphere, the factors evaluated in the Synthesized Form for Children as risk factors relate to insufficiently strong emotional bonds between child and parents and between the child and his / her siblings. Account is also taken of the absence of parental control and support, including the role of the other adults in the extended family, difficulties of the child in making friends with its peers, etc.

The analysis results are illustrated in the next diagram where each of the points shows the common average level of risk factors in each of the monitoring pe-

riods.

The diagram shows that the risk factor level changes significantly with the progress of the program. This is confirmed by the test statistics $F(2, 214)=116.75$, $p=0.00$. In the initial monitoring period (prior to the intervention), the common average level of risk factors was 2.51; in the second period (right after the intervention), their level dropped down to 0.86, with a slight increase in the third period (six months after the intervention ended).

Figure4. Family and social relations – risk factors



This growth of the risk factor level, however, is not statistically significant. We should note the relatively low risk factor level in the initial moment of the social workers' intervention (with the maximal possible value of 7.00), which indicates relatively favourable initial conditions regarding the program implementation.

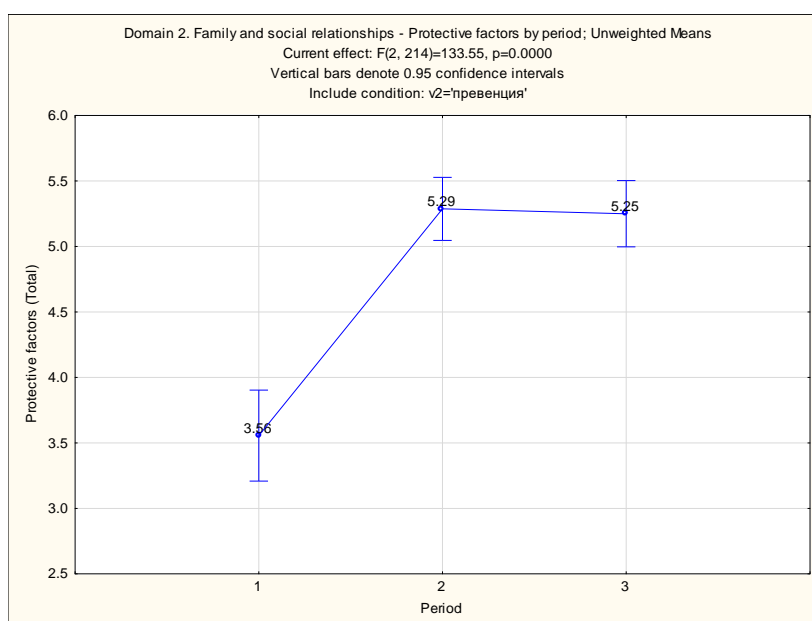
4.2.2. Protective factors

The common level of protective factors, unlike the factors related to the risk of child abandonment, showed a significant rise while the program performance was in progress ($F(2, 214)=133.55$, $p=0.00$).

The initial average level of this group of factors ($M=3.56$) was higher than the corresponding risk factors, which means that the different aspects of family and social relations working in opposite directions were not in balance and were closer to

being favourable to the preventive actions of social workers. They obviously took advantage of this and developed the trend further, because, at the end of the intervention, the protective factors had reached a higher level (M=5.9) and this remained nearly steady six months after the end of the work with the children and their families (M=5.25).

Figure 5. Family and social relations – protective factors



A similar clear trend of improvement of the children’s social and emotional relations was also seen on the basis of the summarized evaluations of the satisfaction of children’s needs. If the needs of 38.89% of the children concerning emotional relations and support were satisfied prior to the intervention, after its end the share of those children had grown to 99.21% and stayed like that after the 6-month period expired.

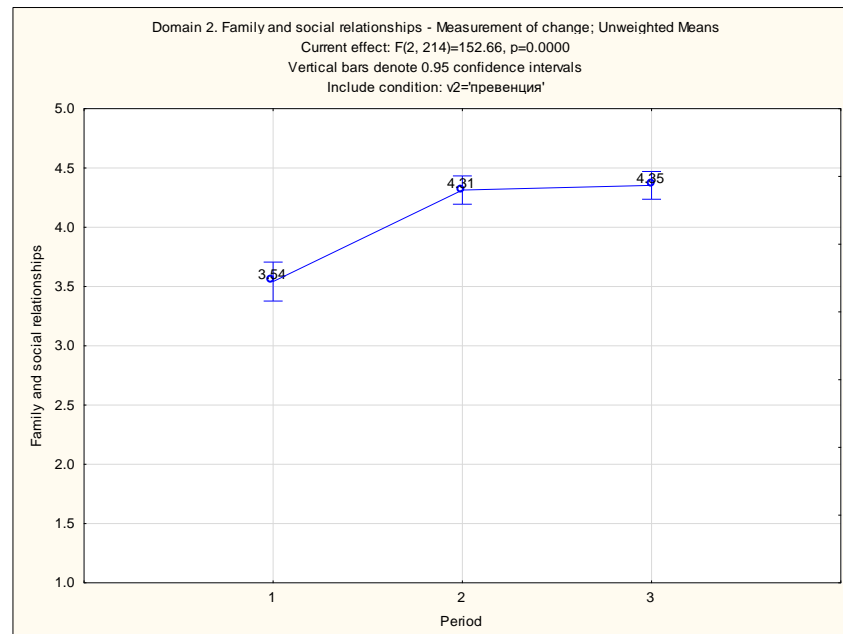
4.2.3 Change evaluation

The change evaluation has 7 indicators (with an option to add more) and can be seen as an extended form of summary of the quality of the social and emotional relations of the corresponding child in the different monitoring periods, and the change due to the social workers’ intervention.

The diagram below illustrates the results of the analysis and gives grounds to draw some important conclusions on social workers’ performance effectiveness. Although the initial level of this variable cannot be considered low (the initial value of

M=3.54 at the beginning of the program), the social workers have managed to significantly improve ($F(2, 214)=152.66, p=0.00$) the quality of social and emotional relations of the children with their parents, relatives and peers.

Figure 6. Family and social relations – measuring the change



With the second measuring of the change, after the intervention ended, the average value was already 4.31. The second conclusion is that the social workers' work has a long-lasting effect because 6 months after the finalisation of their activity, the quality of the relations kept its level (M=4.35).

4.3. Welfare sphere 3. Behaviour

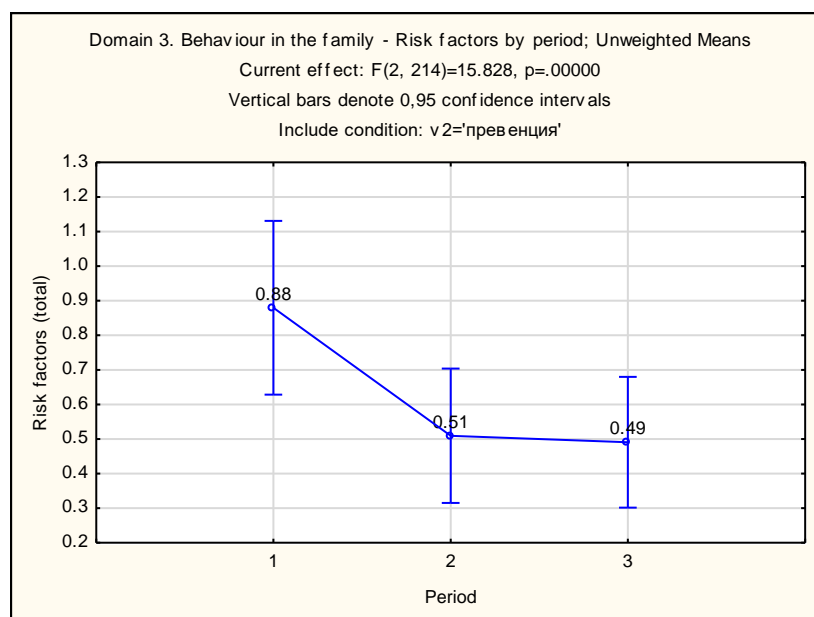
4.3.1. Risk factors

The factors in this welfare sphere that are evaluated in the Synthesized Form for Children as risk factors are related to manifestation of aggressive behaviour of the parents (physical or verbal), alcohol or drug abuse, violation of the law and criminal activity. Some of the indicators describe the behaviour of the child, such as manifestations of uncontrollable anger, reluctance to communicate, running away from home, self-inflicted injuries and/or suicidal thoughts with elder children, etc.

The analysis results are illustrated on the next diagram where each of the points shows the common average level of behavioural risk factors in each of the

monitoring periods.

Figure 7. Behaviour – risk factors

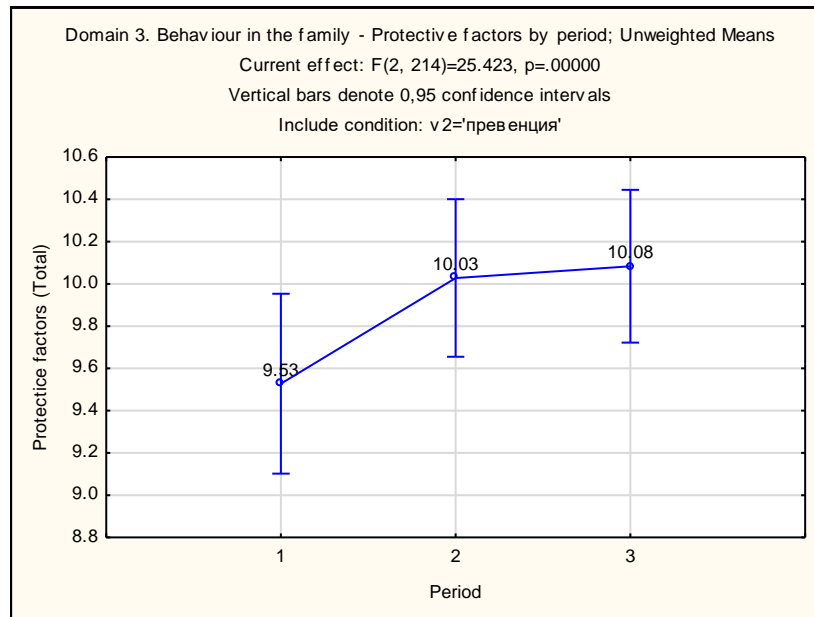


The diagram shows that the risk factors in the sphere of the behaviour of the family members went through a significant change while the program performance was in progress. This is confirmed by the test statistics $F(2, 214)=15.83$, $p=0.00$. If in the initial monitoring period (prior to the intervention) the common average level of risk factors was 0.88, in the second period (right after the intervention) their level dropped down to 0.51 and stayed nearly steady in the third period (six months after the end of the support). We should note here the exceptionally low level of behavioural risk factors in the beginning of the social workers' intervention (with the maximal possible value of 12.00), which indicates that the initial conditions in which the social workers started their intervention were extremely favourable.

4.3.2. Protective factors

In this sphere of family welfare, the contrast between risk and protective factors is probably most clearly manifested. As per the previous spheres, the common level of protective factors, unlike the factors related to the risk of child abandonment, showed a significant rise while the program performance was in progress ($F(2, 214)=25.42, p=00$).

Figure 8. Behaviour – protective factors



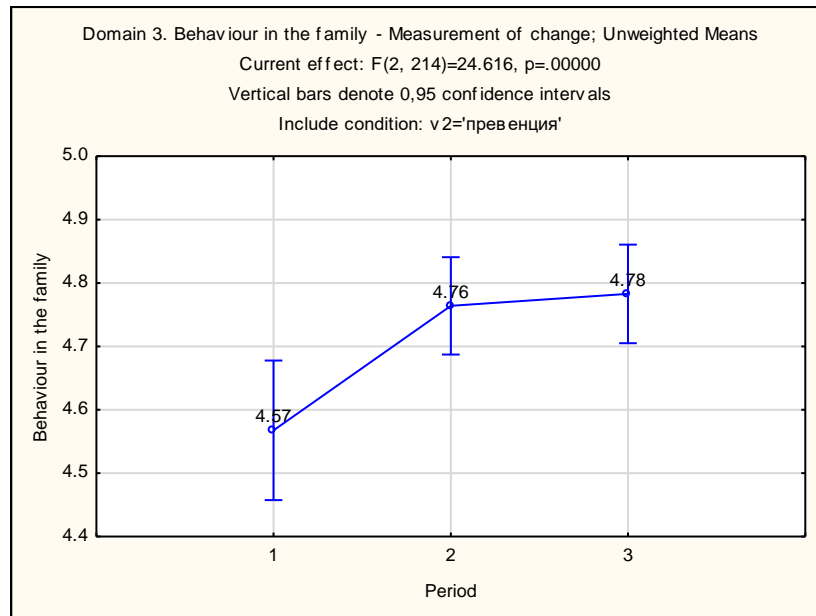
Originally, the average level of this factor group (M=9.53) was much higher in comparison with to the risk factor level which indicates the dominating effect of this group of factors on the behaviour of the families and their children. Nevertheless, this is yet another sphere where the social workers have managed to increase the level by the end of the intervention - the protective factors reached a higher level (M=10.03) and kept it nearly steady six months after the end of the work with the children and their families.

A similar clear trend of improvement of the children's quality of life concerning the child's own behaviour and the behaviour of its parents was also seen on the basis of the summarized evaluations of the satisfaction of children's needs. If the needs of 89.68% of the children were satisfied prior to the intervention, after its end the share of those children grew to 98.41% and raised its level a little to reach 100% after the 6-month period expired.

4.3.3 Change evaluation

The change evaluation has 5 indicators (with an option to add more) and can be seen as an extended form of summary of the different aspects of the behaviour of the corresponding child and the members of its family in the different monitoring periods, and the change due to the social workers' intervention.

Figure 9. Behaviour - measuring the change



The diagram above illustrates the results of the analysis and gives grounds to draw some important conclusions on social workers' performance effectiveness regarding the change of the behaviour of the families and the children in them. Although the initial level of that variable can be regarded as relatively high (the average value in the beginning of the program was $M=4.57$), the social workers have managed to significantly improve the behaviour of the children and their families covered by the program (with the second measuring of the change, after the end of the intervention, $M=4.76$). The second conclusion is that their work has a long-lasting effect because 6 months after the finalisation of their activity, a certain improvement - although statistically insignificant ($M=4.78$) – was noticed in the behaviour of the children and their families. .

4.4. Welfare sphere 4. Physical and mental health

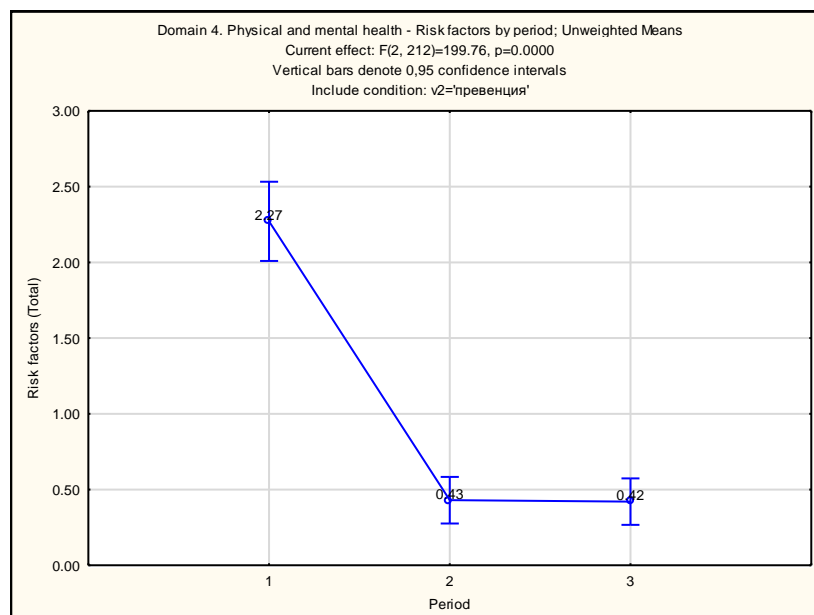
4.4.1. Risk factors

The factors in this sphere of welfare that are evaluated as risk in the Synthesized Form for Children are related to physical health disorders and mental problems of the children or their parents, incapability of the parents to take care of the physical or mental health of their child, etc.

The analysis results are illustrated in the next diagram where each of the

points shows the common average level of risk factors in each of the monitoring periods.

Figure10. Physical and mental health – risk factors

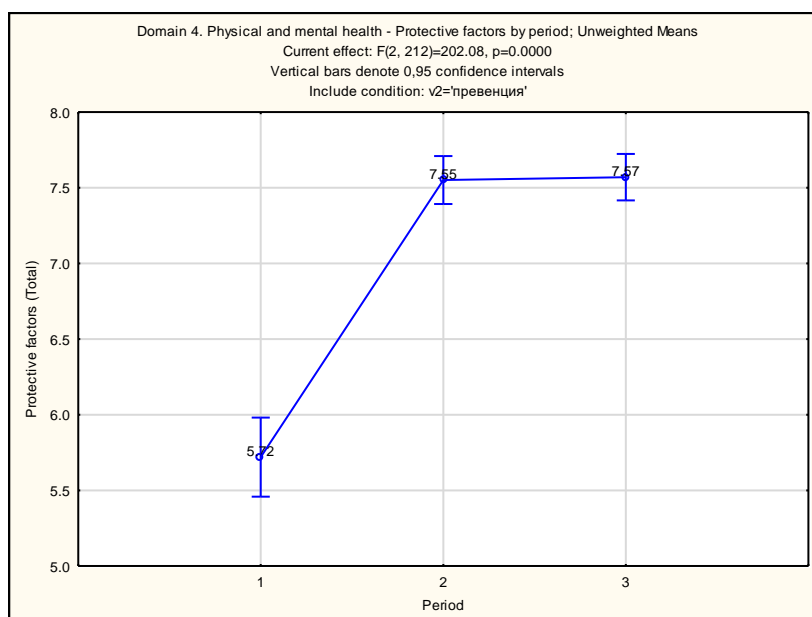


The diagram shows that the physical and mental health risk factor level change significantly with the progress of the program. This is confirmed by the test statistics $F(2, 212)=199.76, p=0.00$. In the initial monitoring period (prior to the intervention), the common average level of risk factors was 2.27; in the second period, (right after the intervention) their level dropped down to 0.43 and stayed nearly steady in the third period (six months after the end of the support). As for some of the preceding spheres, at the start of the intervention of the social workers the level of health risk factors was relatively low (with maximal possible value of 8.00), which indicates relatively favourable initial conditions enabling the social workers to work to the reduction of health risk factors.

4.4.2. Protective factors

The common level of protective factors in this sphere, unlike the factors related to the risk of child abandonment, rose significantly while the program performance was in progress ($F(2, 212)=202.08, p=0.00$).

Figure11. Physical and mental health – protective factors



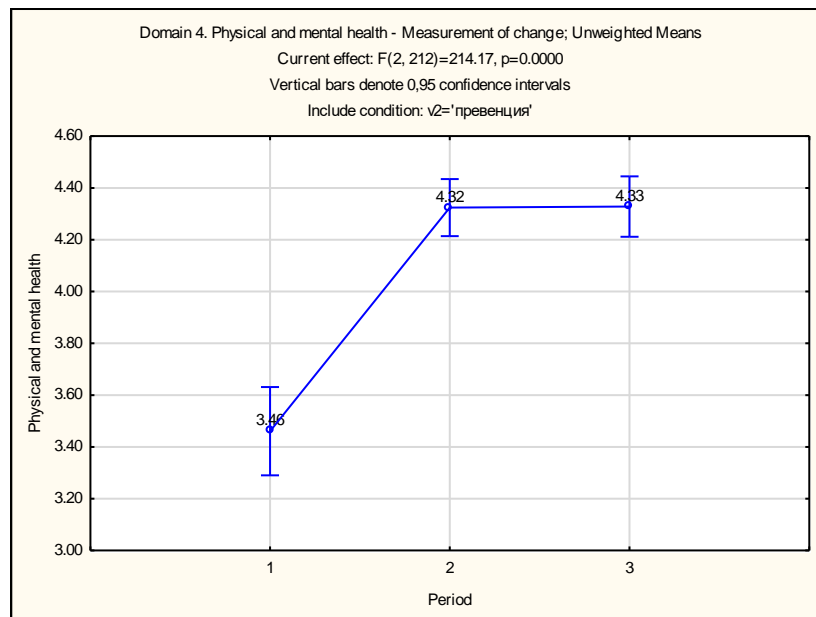
The original average level of protective factor ($M=5.72$) – like some other spheres – was also much higher than the level of the corresponding risk factors. It can be stated that the overall effect of the interaction between risk and protective factors was positive with regards to the health condition of the children and their families. Nevertheless, as an effect of the social workers' intervention, the protective factors after its finalization reached a much higher level ($M=7.55$) and it was kept nearly steady six months after the end of the work with the children and their families ($M=7.57$).

A similar clear trend of improvement of the children's quality of life was also seen on the basis of the summarized evaluations of the satisfaction of children's needs. If the needs of 47.2% of the children were satisfied prior to the intervention, after its end the share of those children grew to 99.20% and stayed like that after the 6-month period expired.

4.4.3 Change evaluation

The change evaluation has 4 indicators (with an option to add more) and can be seen as an extended form of summary of the different aspects of the health condition of the children and their families in the different monitoring periods and the change due to the social workers' intervention.

Figure12. Physical and mental health – measuring the change



Two important conclusions on the effectiveness of the social workers' intervention for better physical and mental health of the children and their families can be drawn on the basis of the diagram above. The initial level of that variable was moderately high (the average value in the beginning of the program was $M=3.46$), but the social workers have managed to significantly improve the health conditions of the children and their families covered by the program (with the second measuring of the change, after the end of the intervention, the average value was $M=4.32$). The second conclusion is that their work has a long-lasting effect because 6 months after the finalisation of their activity, the health conditions kept their level ($M=4.33$).

4.5. Welfare sphere 5. Education

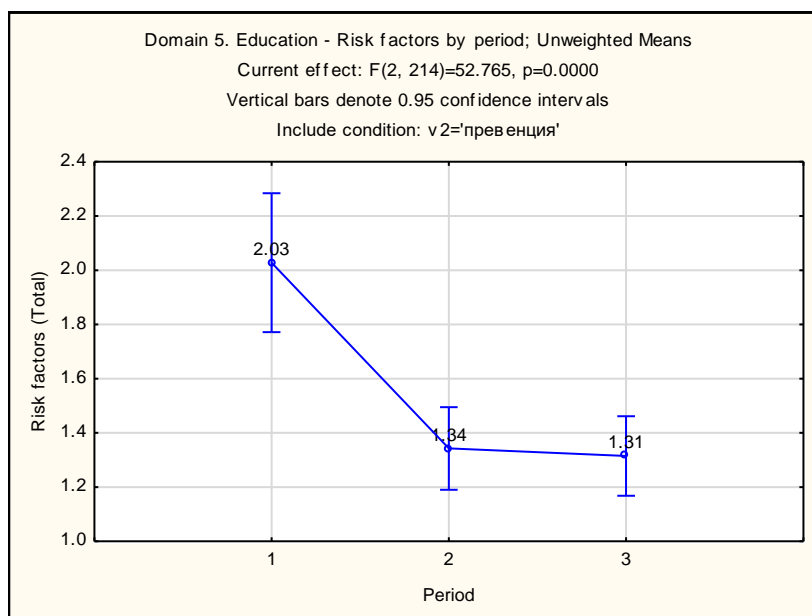
4.5.1. Risk factors

The factors in this welfare sphere that are evaluated in the Synthesized Form for Children as risk are related to the parents not having secondary or primary education, systematic absences of the child from school or falling behind with learning the material at school if the child goes to classes, or the need of the child to receive support for its performance at school but it is not provided, etc.

The analysis results are illustrated in the next diagram where each of the points shows the common average level of risk factors in each of the monitoring pe-

riods.

Figure13. Education – risk factors

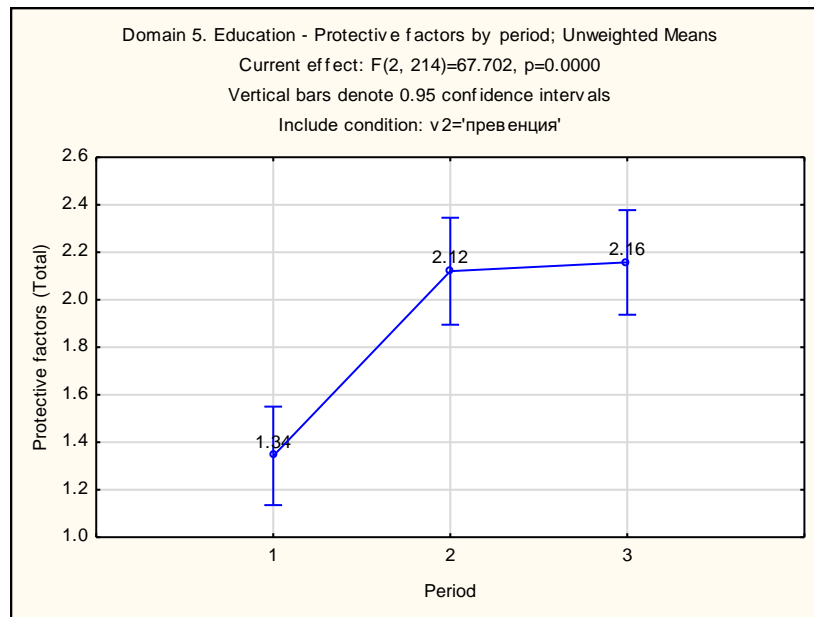


The picture shown by the diagram data is very similar to the situation in the rest of the welfare spheres; the risk factor level change significantly changed with the progress of the program performance. This is confirmed by the test statistics $F(2, 214)=52.77, p=0.00$. In the initial monitoring period (prior to the intervention) the common average level of risk factors was 2.03; in the second period (right after the intervention) their level dropped down to 1.34 and stayed nearly steady in the third period (six months after the end of the support). We should note the relatively low risk factor level in the initial moment of the social workers' intervention (with the maximal possible value of 7.00), which indicates relatively favourable initial conditions.

4.5.2. Protective factors

The common level of protective factors, unlike the factors related to the risk of child abandonment, rose significantly while the program performance was in progress ($F(2, 214)=67.70, p=0.00$).

Figure14. Education - protective factors



Education is among the few welfare spheres where the initial protective factor level is lower (M=1.34) than the corresponding risk factors. This is probably due, on the one hand, to the lower education level of the parents. Considering that all children that were monitored while the program performance was in progress were under the age of 4 (preschool age), it is likely that only a few of the children were covered by a preschool program or used therapeutic services in case of a disability or a health problem. At the end of the intervention, the protective factors had reached a higher level (M=2.12) and kept it nearly steady six months after the end of the work with the children and their families.

A similar clear trend of improvement of the quality of the educational care for the children was also seen on the basis of the summarized evaluations of the satisfaction of children’s needs. If the needs of 11.90% of the children were satisfied prior to the intervention, after its end the share of those children grew to 32.54% and stayed like that after the 6-month period expired.

It should be mentioned that, considering the young age of the children, the indicators of this welfare sphere were not applicable to 67.46% of them.

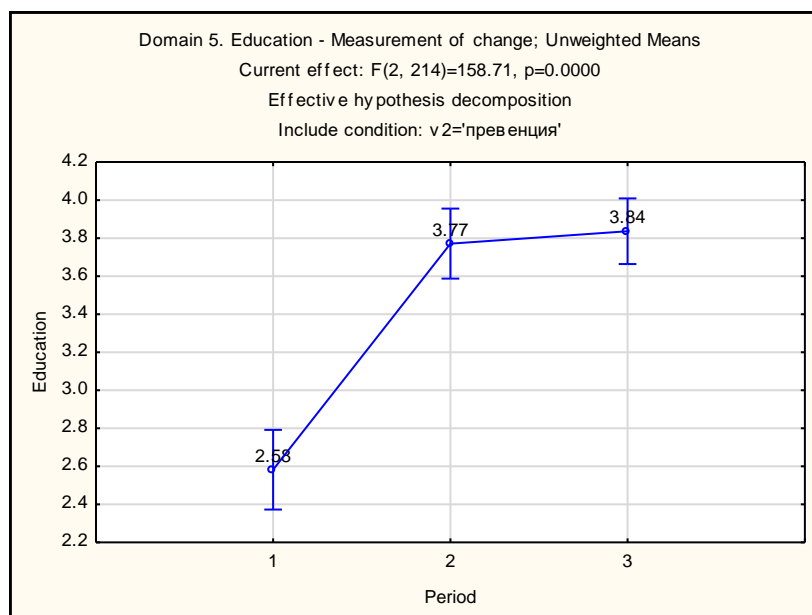
4.5.3 Change evaluation

The change evaluation has 7 indicators (with an option to add more) and can be seen as an extended form of summary of meeting the educational needs the cor-

responding child in the different monitoring periods, and the change due to the social workers' intervention.

The next diagram of the analysis results shows a clear trend that has already been seen in the foregoing welfare spheres. The diagram gives grounds to draw some important conclusions on social workers' performance effectiveness. Regardless of the relatively low initial level of this variable ($M=2.58$ in the beginning of the program performance), the social workers have managed to significantly improve the conditions related to meeting the educational needs of the children covered by the program (with the second measuring of the change, after the intervention ended, the average value was $M=3.77$).

Figure15. Education - measuring the change



The second conclusion is that their work has a long-lasting effect because 6 months after the finalisation of their activity, the level of those conditions shows an improvement, although not significant for the statistics ($M=3.84$).

4.6. Welfare sphere 6. Employment and household

4.6.1. Risk factors

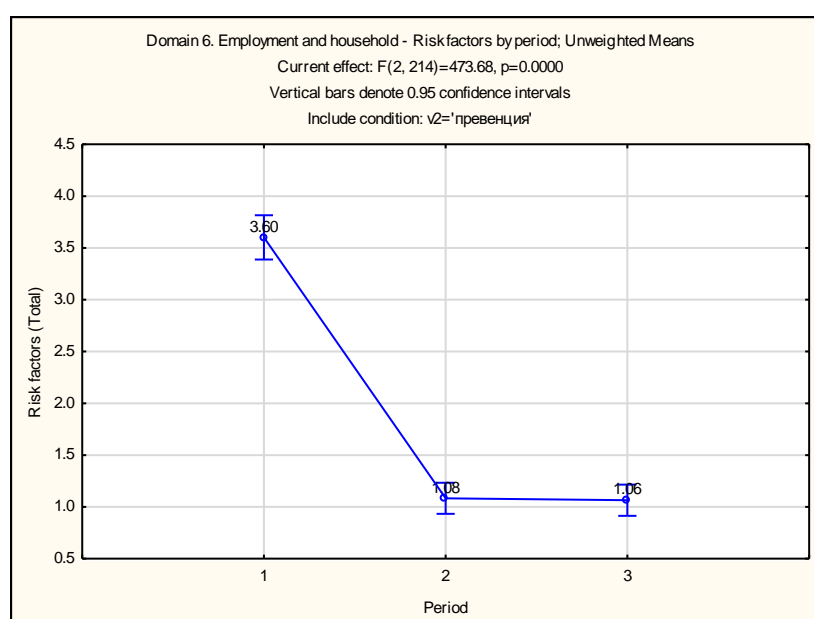
The factors in this welfare sphere that are evaluated in the Synthesized Form for Children as risk factors are related to the unemployment of the household mem-

bers and the lack of capacity or possibility to generate income on the basis of their own work, such as land farming or crafts, as well as the lack of welfare funds or any kind of financial support coming from the extended family.

The analysis results are illustrated in the next diagram where each of the points shows the common average level of risk factors in each of the monitoring periods.

Like in the other welfare spheres, the diagram data show a significant change of the risk factor level with the progress of the program implementation.

Figure16. Employment and household – risk factors



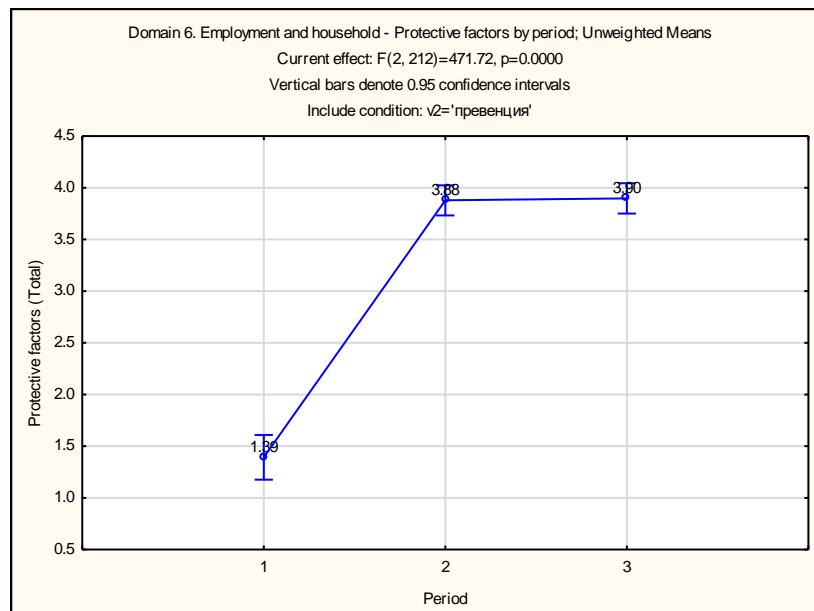
This is reconfirmed by the test statistics $F(2, 214)=473.68, p=0.00$. In the initial monitoring period (prior to the intervention), the common average level of risk factors was 3.60; in the second period (right after the intervention) their level dropped down to 1.08 and stayed nearly steady in the third period (six months after the end of the support). It is worth mentioning that at the beginning when the social workers' intervention started, this important group of risk factors were at a moderately high level, a little above the average (with the highest possible value of 5.00), which indicates initial conditions that seem somewhat unfavourable with regards to the performance of the program related to this group of indicators.

4.6.2. Protective factors

The common level of protective factors, unlike the factors related to the risk of child abandonment, went to a significant rise while the program performance was in progress ($F(2, 212)=471.72, p=0.00$).

As the next diagram shows, the initial average level of protective factors (1.39) was much lower than the level of the corresponding risk factors. This means that as far as employment and financial status of the families, the risk factors that could provoke child abandonment and institutionalization prevailed over the corresponding protective factors.

Figure17. Employment and household – protective factors



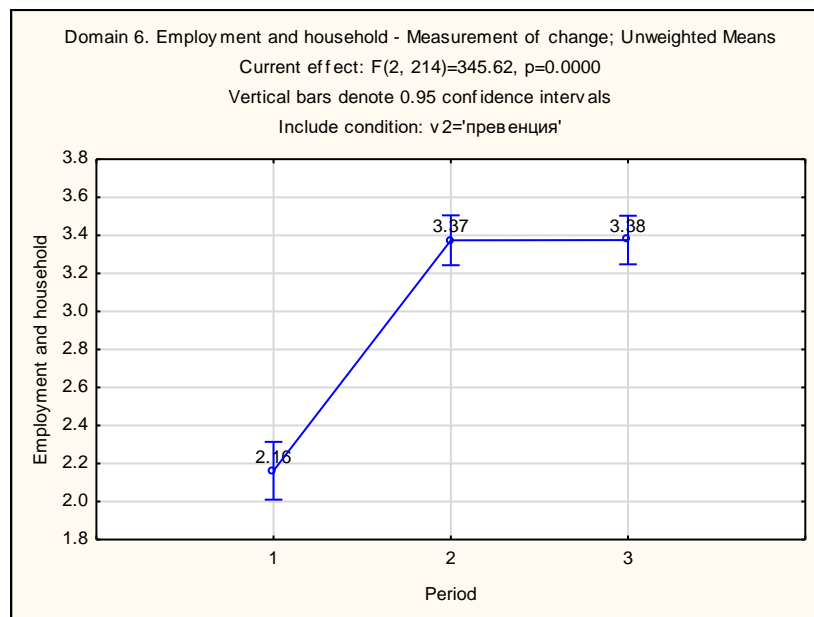
At the end of the intervention, due to the activities of the social workers, the protective factors went to a higher level ($M=3.88$) and kept it nearly steady six months after the end of the work with the children and their families.

A similar clear trend of improvement of the employment and financial status of the families was also seen on the basis of the summarized evaluations of the satisfaction of children's needs. If the needs of 16.67% of the children were satisfied prior to the intervention, after its end the share of those children grew to 100% and stayed like that after the 6-month period expired.

4.6.3 Change evaluation

The change evaluation has 6 indicators (with an option to add more) and can be seen as an extended form of summary of the employment level and financial status of the families in the different monitoring periods and the change due to the social workers' intervention.

Figure18. Employment and household – measuring the change



The diagram above illustrates the results of the analysis and gives grounds to draw some important conclusions on social workers' performance effectiveness. Although the initial level of that variable was moderately high (the average value in the beginning of the program was $M=2.16$), the social workers have managed to significantly contribute to better employment and financial status of the families covered by the program (with the second measuring of the change, after the end of the intervention, the average value was $M=3.37$).

The second conclusion is that their work has a long-lasting effect because 6 months after the finalisation of their activity, the children's quality of life kept its level ($M=3.38$).

5. Conclusion

The purpose of this report is to evaluate the performance efficiency of the so-

cial workers implementing a program focused on prevention work and assistance to families at risk meeting their needs in order to prevent child abandonment and institutionalization. The data collected in three short periods of the program performance were used for effectiveness assessment (1) prior to the intervention (initial assessment); (2) immediately after the intervention (after the finalization of the support), and (3) six months after the work with the children and families was finalized.

The results of the data analysis of all structural elements of the specialised tool - Synthesized Form for Children Raised in a Family Environment - evaluated 6 groups of indicators of the welfare of children and their families. These were used to measure the performance effectiveness. The structural elements are:

1. Risk factors: they cover the aspects of the child's situation that could provoke the parents to take a decision to abandon their child in a specialised institution.
2. Protective factors: they cover the aspects of the child's situation that work in the opposite way and are beneficial to raising the child in the family.
3. Synthesized (dichotomous) evaluation of the satisfaction of children's needs; it combines the effect of risk and protective factors in a complete evaluation.
4. Measuring the change by making a detailed evaluation of the level to which the child's needs are met.

The evaluations cover each welfare sphere in each of the three periods of the program implementation.

Work on risk factors is effective when it leads to a lower risk factor level in the second period (right after the intervention, when the support ends) compared to the first period (prior to the intervention, the initial evaluation). Conversely, effective work in the perspective of protective factors is such an activity that leads to their higher level in the second period compared to the first period. The same criterion should apply to the synthesized (dichotomous) evaluation and to measuring the change.

Another criterion of equal importance is the viability and sustainability of the intervention results in a longer period of time, i.e. keeping the level of the results (or reducing the level (in the case of risk factors), and increasing the level (related to the other measures)).

What is the summarised picture of the **risk factors**?

Virtually the same trend in the level of results can be seen in nearly all aspects of welfare. In the first evaluation period, their level was statistically higher than the level in the second period; in the third period, it stayed at the level of the second period with just negligible, statistically insignificant rates of growth or reduction. Therefore, the conclusion can be drawn that the social workers' intervention in the risk factor sphere was effective.

The picture of the protective factors is the opposite. Starting from relatively low levels in the first evaluation period, they reached statistically significant higher levels in all welfare aspects in the second period, and that remained nearly steady in the third period. Therefore, the conclusion can be drawn that the social workers' intervention in the protective factor sphere was also effective.

We should highlight here a complex factor that probably had an independent influence on the effectiveness of social workers' activities. That is the situation in the monitored families prior to the intervention as stated in the initial assessment, with a special focus on risk and protective factors and the balance between them.

The risk factor level in all welfare aspects is close to or under the average level of the corresponding group of indicators. The risks related to family and social relations, education, and especially behaviour, are lower. More important are the risks related to the living conditions, employment and household. The protective factor level is also close to or under the average. There is an interesting exception related to family behaviour where the protective factor level is extremely high, very much in contrast with the corresponding risk factors. Other spheres with relatively high levels of such factors are the physical and mental health and the family and social relations. Low levels of such factors are clearly seen in the spheres of education, employment and household.

The first four welfare spheres: 1. Living conditions, 2. Family and social relations, 3. Behaviour, and 4. Physical and mental health – have higher levels of protective factors related to the risk factor levels. Conversely, they are lower in the last two (5 Education and 6. Employment and household). It could be said that, speaking in general, the two groups of counteracting factors are not balanced, and the protective factors prevail, which can be seen as a condition that is somewhat favourable to the social workers' performance while implementing the program activities.

The results of the synthesized (dichotomous) evaluation of the satisfaction of children's needs also provide evidence of the successful performance of the preven-

tion work as there is a significant growth of the number of children whose needs are satisfied in all welfare spheres.

The data for measuring the change – groups of indicators used for direct evaluation of the social workers' effectiveness – reveal a model of change very similar to the protective factors: a relatively low level in the initial period (prior to the intervention, the initial evaluation), a significant increase in the second period (right after the intervention, after the end of the support) and a sustained level 6 months after the end of the intervention.

Therefore, the conclusion can be drawn that in all spheres of welfare of children and their families there are significant improvements of the existing conditions that can be explained by the effective performance of the social workers within the program for prevention of abandonment of children and institutionalization.