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BACHELOR THESIS

DOES REMEDIAL EDUCATION HELP DISADVANTAGED CHILDREN IN THE CZECH REPUBLIC?

EVALUATION OF EDUCATION SUPPORT PROGRAMME

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ABSTRACT

Title: Does Remedial Education Help Disadvantaged Children in the Czech Republic?
Subtitle: Evaluation of Education Support Programme
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Abstract: Programmes supporting education are one of the main activities of non-governmental organizations. However, the information about effects of such programmes is often misleading, as it provides only limited clarification on improvement observed with the treated children. This thesis concentrates on a particular project of the Czech non-governmental organization People in Need, where selected children from families endangered by social isolation received extra tutoring.

In this study, the whole course of evaluation is described, revealing the process of data collection in the field. The main part of the thesis focuses on analysis of the programme, comparing the control and treatment groups before and after joining the programme using difference-in-differences method. The aim of the thesis is to show the true impacts of the remedial education on school performance, school absenteeism and school behaviour of the children. Moreover, the research will reveal the change that the programme had on the parents' attitude towards educating their children.
Classification: JEL C93
Key words: evaluation, education, non-governmental organisations

ABSTRAKT

Názov práce: Pomáha doučovanie znevýhodneným deťom v Českej Republike?
Podtitul: Evaluácia vzdelávacieho programu
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Vedúci práce: PhDr. Julie Chytilová Ph.D.
Abstrakt: Programy podporujúce vzdelávanie detí predstavujú jednu z hlavných aktivít mimovládnych organizácii. Informácie o dopadoch takýchto programov však bývajú často zavádzajúce, pretože poskytujú iba limitované objasnenie zlepšenia pozorovaného na účastníkoch. Táto bakalárska práca sa zameriava na konkrétny projekt organizovaný českou mimovládnou organizáciou Človek v tísni, v rámci ktorého boli doučované deti z rodín ohrozených sociálnym vylúčením.

V tejto práci opisujeme celý priebeh evaluácie a priblížime proces zberu dát. Hlavnú časť tvorí samotná analýza programu, uskutočnená prostredníctvom metódy difference-in-differences porovnaním testovacej a kontrolnej skupiny pred a po zapojení sa do programu. Cieľom práce je odhaliť skutočné efekty doučovania na školské výsledky, dochádzku a správanie. Náš výskum navyše ukazuje zmeny, ktoré mal program na prístup rodičov doučovaných detí ku vzdelaniu.
Klasifikácia: JEL C93
Kľúčové slová: evaluácia, vzdelávanie, mimovládne organizácie

CONTENTS:

1. INTRODUCTION

The primary goal of this thesis lies in evaluating the Education Support Programme, a project launched by the Czech non-governmental organization People in Need. Its core is represented by tutoring selected children from families from socially isolated background. The target of the project was not only helping the children perform better at school, but also helping their parents see the importance of education. After 3 years of the programme's life, a rigorous evaluation follows which assesses its true impacts on participating children and their families, using rigorous econometric tools. This study therefore consists of describing the research in the field with successive data analysis.

The evaluation focuses on analysing two main research questions - How the child's attitude towards education changed and how the parents' attitude towards education changed. To measure the impacts, we first identify children for control and treatment groups. In the next step, we describe the data collection which regarded children's school performance, school attendance and school behaviour. This data was collected on primary schools the children attend. Moreover, questionnaires for children, their younger siblings, teachers and volunteers provided additional information on changes in family environment after participation in the programme.

As we had no possibility to influence the selection of the children who received tutoring by randomization, we had to eliminate possibilities of the selection bias. Then, the collected data was evaluated using the difference-in-differences method (data from schools) and simple difference method (data from questionnaires), taking into account the treatment group compared to the control group in periods before and after joining the programme. Where it is possible, we analyse separately periods half year, one year and more than one year after the child joined the programme. Also, as a part of the data analysis, we divide control and treatment groups into subgroups according to gender and size of the family and look for trends within these subgroups.

To sum up, this study reveals the true impacts that the programme had on children exposed to it. The results should serve as an indicator of the programme's actual effectiveness.

The thesis is structured as follows: In chapter 2, general information about the Education Support Programme can be found. The chapter also contains a review of evaluations dealing with programmes similar to this.

Chapter 3 describes the whole dataset, starting with posing the research questions, continuing with description of data population and the final sample size. The section continues with revealing main data sources and explanation of information they provided. Also, statistical overviews in form of graphs depict the main characteristics of the sample. The chapter's last part deals with main difficulties we experienced during our research.

The actual data analysis can be found in chapter 4. In this section, we start with description of the rigorous methods that were used. The main part of the chapter then shows the outcomes of our data analysis. The last section of chapter 4 includes several tables and graphs showing the actual numbers the evaluation resulted in.

Main findings are summed up in the conclusion in chapter 5 at the end of the study. Here, we also mention some ideas what to improve for potential future analyses.

In addition, at the end of this thesis, you may find an appendix containing materials that were used for our research (questionnaires for a treated child, its volunteer, teacher, and a game that was played with the younger sibling of the child).

2. GENERAL OVERVIEW

This chapter consists of few informative remarks, which serve mainly as an introduction into the topic. Firstly, we shall mention the main idea of the programme that is being evaluated. The second part of this chapter deals with field experiments that were conducted in other parts of the world and that also concentrated on programmes aimed at education support. Although these mainly include programmes launched in developing countries, the core of the programmes and the research designs are more or less similar to our study.

2.1. DESCRIPTION OF THE EDUCATION SUPPORT PROGRAMME

In 2006, the Czech branch of the organisation People in Need[1] introduced a programme aimed at education support for children from a socially isolated environment. The Education Support Programme was launched as part of a broader project that has been dealing with social integration.

The problem of social isolation concerns mainly spatially segregated objects, usually clusters of houses on a town periphery. Typically, basic infrastructure and facilities are missing[2]. People living in these communities live in poverty with insufficient education and social status. This is often the reason why they lack motivation for educating their children.

The Education Support Programme was developed to help fight this phenomenon. The programme provided free tutoring for selected children. The major idea was not only to improve the school performance and school attendance of these children, but also to help motivate and educate the children's parents. The programme's objective was to help these parents see the importance of education for their children. Ideally, the parents should change their attitude towards education so that their children would not need further tutoring as the parents would overtake the role of tutors.

Therefore, a crucial part of the implementation of the programme was tutoring the children at their home, in the presence of at least one parent. Once a week, for one to two hours, a volunteer from the organization People in Need came to the family and helped the child with

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[1] Člověk v tísni, o.p.s.; this organization is the biggest non-governmental organization in the Czech Republic and one of the largest of its kind in the post-communist Europe. It operates in 37 countries all over the world.

[2] These may include elementary schools, but very often also hot water or gas pipelines.

the homework and preparation for school. In addition, the volunteer's task was to ask questions about the child's school performance or problems with behaviour and include the present parent(s) in the tutoring.

The programme has been launched at quite a large scale. At the time of the research, the programme has been running in nine Czech towns/regions.[3] In every region, a coordinator has been responsible for its implementation and management. His role was to find and manage volunteers and help them recognize the target families and start the tutorship for the selected children. Also, most of the volunteers together with the coordinators contacted the primary schools the children attended. Often, the volunteers consulted with the children's teachers, what they should help the child with.

Since the beginning, up to 200 children joined the programme, at the time of the research, around 150 were tutored. The programme is still running and aims to continue in the future.

In most regions, the children chosen for the programme attended lower classes in elementary schools (many of them attend the first class). The reason for this is quite simple – the younger the child, the more probable it is that the tutoring will have the desired effects on the children and their parents. However, the tutoring had to be often terminated because of the lack of cooperation between parents and the volunteers, as the parents often failed to prepare a good working environment for the time of the volunteer's visit. In addition, their interest in such services often faded and thus the cooperation did not make sense any more.

On the other hand, quite many children left the programme, because they did not need the tutoring any more. Our research hopes to reveal its true impacts via a rigorous econometric evaluation. Firstly, we will try to focus on the children's school grades and school absenteeism. Moreover, we hope to disclose the effects that this programme had on the parents and their attitude to their children's education.

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[3] The regions are Bílina, Chomutov, Kladno, Libčice nad Vltavou, Liberec, Neratovice, Olomouc, Praha, Ústí nad Labem. At the moment, the programme operates also in Sokolov.

2.2. SIMILAR EVALUATIONS

Analysis of effects of education represents one of the main targets for development economists. One of the Millennium Development Goals struggles for universal primary education and elimination of gender disparity in education by 2015. Therefore, a large part of researches from this area focus on factors that influence the interest in education and impacts of schooling on later life of individuals.

In below mentioned researches, different applications of randomization method were used. This approach is based on conducting research evaluation by identifying children fit for the programme and then randomly selecting among them the individuals for treatment group. The randomization technique ensures a good statistical similarity of control and treatment groups, as it fully eliminates the selection bias (the term is explained in later chapters).

Several studies focused on testing, whether cutting costs of education helped increase children's school enrolment and school attendance. For example, in Kenya, randomly chosen children were provided with free uniforms. A research of Evans et al. (2008) concluded, that the school attendance increased for the treated children, having larger effect on girls (increase by 14.8 %). The results led to expansion of the programme to other parts of South America as well.

Kremer et al. (2004) proved effectiveness of providing free uniforms, textbooks and classroom construction to schools in Kenya, showing ca. 15 % decrease of the drop-out rate compared to children from control schools. Moreover, the programme attracted more children to schools, increasing an average size of a class by 8.9 children. Impacts of free provision of school meals in Kenya were assessed by Kremer and Vermeersch (2004). The study revealed a 30 % increase in school participation.

A study of Schultz (2004) evaluated the Mexican programme PROGRESA. This programme granted cash to families whose children attended school regularly. The research found that the programme had significant effect on number of children enrolling for secondary school, but only a slight increase of school attendance appeared with younger children.

An interesting research in India by Bobonis et al. (2004) showed that increasing health of children by granting deworming medication was a very cost-effective way to increase their school attendance. A similar programme was launched in Kenya, where Miguel and Kremer

(2004) found improvement in school attendance not only for treatment schools, but also for nearby schools profiting from a reduction of the disease.

For the purposes of our research, much attention was given to a study by Banerjee et al. (2007), which evaluated a balsakhi programme in India. The programme was launched by Pratham, an Indian education non-governmental organization, and it provided remedial assistance for children lacking basic literacy and numeracy skills. For each poorly performing child, a tutor (called balsakhi) was assigned. Mostly young women taught the child several hours per week. The evaluation revealed improvement in test scores by 0.28 standard deviation, with larger effects on children with very poor results at the beginning.

Another study of Angrist et al. (2002) measures effects of allocating school vouchers in Colombia. In this programme, vouchers were distributed to selected families to cover the cost of private secondary schools conditional on the academic performance of the students. Similarly to our situation, the demand for the programme exceeded the supply, and the research design therefore included randomization among the interested individuals. The results show that the treated children profited from the programme mainly due to reduced grade repetition. Also, their test scores improved, with greater effects for girls than for boys.

3. DATA DESCRIPTION & DATA COLLECTION

In this part, we will describe the whole dataset used for our research. In the chapter 3.1., we ask the two basic questions that were set for our research. A detailed description for both of them follows. In the next section, we write more on data population, which was divided into a treatment and two control groups. After that, the chapter 3.3 contains information on the data collection, beginning with an insight to the whole process of data collection in the field, followed by description of the final sample size. The next part deals with main sources of data for the research. A brief graphical overview is included that characterizes the data sample. Afterwards, some difficulties experienced during the data collection conclude the chapter.

3.1. RESEARCH QUESTIONS

There are two main areas we focus on when evaluating the Education Support Programme. The first one deals with the change in the child's attitude to education, reflected in a change in his/her school performance, school absenteeism and the behaviour at school. The second area concentrates on a change in the family environment, represented by a change of child parents' attitude towards education. A more specific description of these research questions follows.

3.1.1. CHANGE IN CHILD'S ATTITUDE TOWARDS EDUCATION

The first question in interest was: "Is there a change in the child's attitude to education? If so, what is the change?" With this question, we aim to explore whether the child's grades at school improved (change in school performance), whether the child attended school more often (change in school absenteeism) and whether the child had less problems with school conduct (change in school behaviour). As the children often experienced at least some of the above mentioned problems before their participation in the programme, these might be appropriate questions to ask.

We strongly believe that the change in school performance is an important factor showing the effectiveness of the programme. Looking at the children's grades before and after joining the programme and comparing them with the grades of the children in control groups (the concept of the control group will be explained later), we should be able to uncover the size of the impact that the programme had on the children's attitude towards education. We would assume that an improvement in the school performance would mean, that the child learned

more than before participating in the programme and thus cared about its grades and its education, in general, more than before.

Also, revealing the change in school absenteeism could bring valuable information about the programme's effectiveness. If the children attended school more often, we may assume that there was a positive effect of the programme on child's attitude to education. However, if the school absenteeism for these children increased, it would mean that the programme worked in the undesired way – the education gained by tutoring would be only a substitute to the education received at school and thus the programme would not have positive impacts on the change in the child's attitude to education.

The third subarea in this researched question was, whether there were any changes in the behaviour of the child at school. We believe, that the change in the child's attitude to education could be well reflected in the change of its school conduct. This would mean receiving less reprehensions (which are delivered most often in case of misconduct against school rules, in case of impertinent behaviour towards teachers or classmates, or in case of not executing one's school duties) and it may also mean more appraisals (which are granted most often for model school work or exemplary behaviour, for helping in the class or for attending school competitions). Therefore, these educational measures are considered to be a good indicator for the child's attitude to education.

Initially, this research question included one more area to explore – we tried to examine, how the child's bonds with his/her classmates changed. For example, one possible effect of the Education Support Programme could be that the child became more friends with his/her classmates who had good grades. To obtain this information, we would need to collect confidential data also for the child's classmates. However, it was not possible to collect signed approvals for all the children from class, therefore this area remained unexplored.

3.1.2. CHANGE IN PARENTS' ATTITUDE TOWARDS EDUCATION

The Education Support Programme was introduced not only to help children with their problems at school, but also (and mainly) to help the parents of these children see the importance of education. Therefore, the second research question was: "Is there any change in parents' attitude towards education? If so, how significant is the change?" We believe that the questions about the family environment, about the way the parents help their child with preparation to school etc. could be a good indicator of these changes.

Obviously, as the parents bear the main responsibility for their child's education, the change in his/her school performance, school absenteeism and school behaviour may also reflect the change in parents' attitude toward education.

However, when we focused on measuring the change in parents' attitude towards education, we mainly concentrated on answering questions like: How much did the parents care about their child's education? How often did they help the child with its preparation for school? Were they able to prepare a good working environment for the child to learn to school? How often did the parents request information about their child's school performance, school absenteeism or school behaviour? How did these changes influence the way parents raised younger siblings of the tutored child? Did the volunteers experience any problems with the parents of the tutored child?

Another possible impact of the Education Support Programme would be a change in how parents raised younger siblings of the tutored child. If the tutoring programme influenced the parents so that they realize the importance of their children's education, we assume that the younger sibling would have better pre-school preparation, more educational toys etc. Therefore, we also tried to find the appropriate data for younger siblings of the children.

To sum up, we may say that if the programme had the desired effect on the parents' attitude towards education, we would expect an improvement in at least some (ideally all) these areas – i.e. better conditions for the child to learn at home, more frequent visits at school to obtain information about the child's school performance, change in raising the younger siblings of the children etc.

3.2. DATA POPULATION

For the proper evaluation of the Education Support Programme, it was essential to choose the sample for the data collection carefully. Together with the volunteers and coordinators from the People in Need, a list of children was created. This population for the research was divided into two subgroups: a treatment group and a control group.

3.2.1. TREATMENT GROUP

The treatment group consists of the children exposed to the programme. These include the children who received tutoring in school year 2008/09, as well as the children, who had joined the programme before and by the end of the researched period, their cooperation with the volunteers terminated[4]. The basic condition for being assigned to the treatment group is that the child was tutored at least for 4 months[5], so that both subgroups (children exposed to the programme in 2008/09 and children exposed to the programme before, but for at least 4 months) could form the treatment group.

However, because of this limitation, not all of the children participating in the programme could be included in the research. The reasons for this are various:

- Firstly, a significant number of children included in the programme attended only the first class at the time of our research.[6] Because of this, we could not collect the data history for their school performance and school attendance. Thus, these children had to be excluded from the data sample.

- In addition, the data selected for the collection were on a large scale personal and confidential. Therefore, a signed approval of the children's parents was required. Occasionally, the parents refused to give permission for the inclusion of their children in our research. These had to be excluded from the data sample as well.

3.2.2. CONTROL GROUP

In order to be fully able to disclose the impacts of the Education Support Programme, it was necessary to select children that would form a control group. These should include children that are statistically very similar to the ones in the treatment group. Statistical similarity in our case means similar social background, similar school performance and school absenteeism, similar behaviour patterns at school, etc.

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[4] This group of children was called treatment group-terminated.

[5] The period 4 months was chosen, so that the fact that the children were being tutored could be projected to their school marks in one school half-year.

[6] The research was conducted during the school year 2009/2010, the researched period ended in the school year 2008/2009.

Although the comparison with our control group should provide a quality sample for the research, there still would be a danger that we would not be able to eliminate the true effects of the programme. This danger would come from a phenomenon called "selection bias". According to (E. Duflo, M.Kremer, R.Glennerster; 2006)[7], a selection bias *"arises when individuals or groups are selected for treatment based on characteristics that may also affect their outcomes and makes it difficult to disentangle the impact of the treatment from the factors that drove selection."*

That means, that the children from the treatment group are somehow more suitable for the programme than the children that did not receive the tutoring (e.g., in the situation when there are more children applying for the programme than the volunteers available, the volunteers are assigned to those children, who have better preconditions for the programme success).

Therefore, the most important condition for the statistical similarity was the fact that the children from the control group would be assigned to the programme, were there more volunteers from People in Need. The organization People in Need does have problems with the lack of volunteers and therefore, not every eligible child is included in the programme. This condition should have eliminated most of the selection bias.

Ideally, the children in the control group should have same or similar results as the children in the treatment group had before joining the programme. Only after comparing the results of the treated children after their participation in the programme with the results of the children from the control group, the actual impacts of the programme could be eliminated from other factors and reliable conclusions about the effectiveness of the programme could be drawn.

Even if the results at the beginning of the period were not the same, using the difference-in-differences method (described in later chapters), we once again could arrive at the true effects of the programme.

However, due to several factors, identifying and tracking of children for the control group turned out to be almost impossible. As we already mentioned, the collection of the data depended strongly on the signed approval of the children's parents. As the ideal candidates for

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[7] Duflo, E., Glennerster, R., and Kremer, M. (2006): Using Randomization in Development Economics Research: A Toolkit; Bureau for Research and Economic Analysis of Development Working Paper No.136. p.4.

the control group consisted of children, who were suitable for the programme but did not receive it, the willingness of these parents to provide such approval was limited. Therefore, the statistically similar control group consists of only few children.

This was the reason, why a second type of control group was formed. This group consisted of the classmates of the children from the treatment group. These may not have similar social background, school performance or school absenteeism as the children exposed to the programme. Still, they are a reasonable sample for comparison, as they provide data that eliminate some other factors that influence the results but are not connected with the tutoring programme.

Such factors could include a flu epidemic, which would increase the school absenteeism for more children in the class, including the child from the treatment group. Another example would be an increase in demands of the teachers on children, which would most probably worsen the grades not only for the treated child, but also for his/her classmates.

Very often, the schools provided the data for the treated children together with the data for their classmates (although these were anonymous), so this secondary control group includes a satisfactory number of children.

To sum up, creating a control group (or, in our case, two types of control groups) should allow us to disentangle the direct effects of the programme (comparing the children suitable for the programme from the treatment and control group), as well as the indirect effects of the programme (comparing the children suitable for the programme from the treatment group, with the children which do not have to be assigned to the programme from the control group).

3.3. DATA COLLECTION

After introducing the research questions and the data population, we now focus on the actual data collection. First, the actual process will be described, followed by description of the sample size. Afterwards, we will list the sort of data that was collected, structured according to the source that was used for its collection. The section is concluded by mentioning some problems we experienced during the research that affected the number of observations for our sample.

3.3.1. PROCESS OF DATA COLLECTION

The data were collected by either the coordinators or volunteers from the organization People in Need (data from questionnaires) or by me (data from schools).

The actual data collection was performed in months October 2009 – February 2010. Altogether, 42 primary schools in 9 regions were approached. However, only 19 schools were actually visited. In addition, one school agreed to provide the data for the child in interest and aggregated data[8] on grade averages and absences of her classmates.

In every visited primary school, apart from collecting the data about the school performance, school absenteeism and school behaviour, I tracked the child's class teacher and gave him the questionnaire for the teacher.

As for the questionnaires for the child, his/her younger sibling(s) and the volunteer, these were filled in by the coordinators and/or volunteers engaged in the Education Support Programme. The questionnaires for the children and their younger siblings were filled in mostly at child's home during the tutoring.

For the primary control group, only questionnaires for children (and perhaps their younger siblings) and for teachers were collected. For children from the treatment groups, we also collected the questionnaire for his/her assigned volunteer from People in Need.

3.3.2. SAMPLE SIZE

As we mentioned in the first chapter, during the time of our research, around 150 children were tutored in the programme and up to 50 children had been exposed to the programme and the tutoring was terminated for them.

At least some of the data was collected for 90 children (16 / 66 / 8)[9].

As for the complete non-confidential data (data from all the required questionnaires), it was collected for 61 children (16 / 42 / 3).

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[8] hence not for each classmate separately, but only for the whole class together.

[9] All the numbers in parentheses in this section are listed in the form: (number of collected data for Control/ Treatment/ Treatment-terminated group).

We received the data from school reports for 44 children in total (8 / 29 / 7), out of that number, 39 children (5 / 27 / 7) also have data on their classmates. The secondary control group included 682 children.

Because of all difficulties experienced during the research, complete data (all required questionnaires and data about child's own grades and his/her classmates' grades) was collected only for 20 children in total (3 / 15 / 2).

The sample included together 46 girls (6 / 35 / 5) and 44 boys (10 / 31 / 3) in total. These were equally distributed from a large family (4 / 25 / 4) and from small/medium families (12 / 19 / 4)[10]. Most of the children were in age between 9 to 12 years (7 / 35 / 5), 22 % of all children attend special schools and 36 % had to repeat class during their education.

The data was collected altogether for 35 volunteers, out of which only one third are men. Almost one half of the volunteers have a university degree, about 40 % other volunteers study. The data include comparable subgroups of volunteers working with People in Need for less than 1 or one to two years, the greatest subgroup form volunteers cooperating with the organization for more than two years (40 %)[11].

3.3.3. COLLECTED DATA

For research purposes, two main sources of data were used. The first one was represented by children's school reports, the second ones were questionnaires, which were prepared in four versions according to the person they were designed for - we prepared a questionnaire for the child's teacher, for the volunteer, for the child itself and also a questionnaire for the child's younger sibling(s). In addition, questionnaires for the children were prepared in three versions – one for children from the control group, one for children from the treatment group and one for children from the treatment group-terminated. Please notice that the questionnaires, as well as a more detailed description of the games played with younger siblings, can be viewed in more detail in the Appendix at the end of the thesis.

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[10] We classify a small/medium family if it includes maximum 3 children. A child comes from a large family if it has at least three siblings.

[11] Graphs A1-A6 and B1-B6 depict the sample in section 3.3.4.

a) SCHOOL REPORTS

From the children's school reports, we were able to collect the information about the school grades[12] (being the indicator of school performance), the number of excused and unexcused absences from school[13] (being the indicator of school absenteeism) and the number and type of educational measures[14] (being the indicator of school behaviour). As the last ones were in fact verbal assessments, we developed a point system in order to be able to measure and compare them. The system assigned +2 points for each teacher's appraisal, and -1 to -3 points for reprehensions according to the severity of the educational measure (the most severe carrying -3 points).

Data from school reports was collected for all groups of children (treatment, treatment-terminated, primary control and secondary control group). We attempted to collect this data for the periods beginning two years before joining the programme and ending in the school year 2008/09[15].

b) QUESTIONNAIRE FOR THE TEACHER

First of all, we asked the teacher, how long he/she teaches the child and how many children participating in the programme are in the child's class together.

The next set of questions regarded the interest of child's parents in its performance, absenteeism and behaviour at school. We inquired, how often the parents informed themselves about their child at the school (concretely at the class teacher who filled the questionnaire in). We attempted to collect this information about two periods – the period before the child received the People in Need's tutoring and the period during the programme[16]. This way, we hoped to find out how committed the parents were in the child's education.

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[12] For our research, we used as a measure averages of the school grades, including grades from all subjects.

[13] The unexcused absences are granted in case the child missed classes at school and did not have a proper explanation or parents' approval to do so.

[14] Educational measures include teacher's approvals , teacher's and director's reprehensions and worsened grades for behaviour.

[15] As we collected the data in months October 2009 - February 2010, it was not possible to get the data for the first school half-year in 2009/2010.

[16] Often, for the period before its participation in the programme, this data was impossible to collect as the teachers who filled the questionnaires in did not teach these children in that period. Therefore, they were not able to answer these questions.

Furthermore, we asked the teacher, whether the child seems to like to go to school (again we attempted to collect this information about two periods: before and during the participation in the programme). Moreover, we were interested in whether the child had problems at school before joining the programme and what these problems were (questions about the child's behaviour, the child's concentration during classes, etc.). In addition, we asked whether the frequency of such problems differed after the child was included in the programme.

The last part of the questionnaire for the teacher included fifteen questions about the child's personality using the Big Five Personality Traits method. This method assesses the personality regarding one's Openness to experience, Conscientiousness, Extraversion, Agreeableness and Natural Restrictions (also called OCEAN). For our research, we applied the same questions as were used for the research in Dohmen et al. (2008).

The teachers were asked all these questions personally during my visit at the primary school. The questionnaire for teachers regarded only children from the treatment group, treatment group-terminated and the primary control group. We did not collect this data for the secondary control group.

c) QUESTIONNAIRE FOR THE CHILD

As we already mentioned before, three versions of the questionnaires for children were prepared – for each of the group treatment, treatment-terminated and primary control. In fact, the questions in these three versions were similar.

In the control group version, instead of asking about two periods (before and during participation in the programme), we were only interested in the current situation. Also, all the questions concerning the tutoring were left out. In the treatment-terminated group version, the questions regarded different two periods – during and after the child's participation in the programme[17]. All other questions were the same as in the treatment group version. Therefore, only this version of the questionnaire will be further described.

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[17] These periods were chosen, so that we do not get very confusing answers. We expected that the child would be able to answer questions about two most recent periods, and that it would have some difficulties answering questions about the period before joining the programme.

Firstly, we collected basic information about the child - we asked about its gender, age, number of siblings and year of school attendance. Furthermore, we asked whether the child had to repeat any classes, whether it attended some other school in the past and whether he/she attends a special school[18] and if so, for how long. The questionnaire also included questions about the child's extra-school activities, hobbies, duties at home or motivation to go to school. We also asked whether the child likes to go to school and whether he/she liked to go to school before joining the programme. Further type of collected data was on whether the child has its own room and/or desk and whether he/she has time and space at home to learn undisturbed.

Another part of the questionnaire focused on the tutoring. We asked, for how long the child has been participating in the programme and which school subjects he/she has been tutored in. A group of questions concerning the frequency of child's learning for school followed. These inquired after how many times and how many hours on average per week the child learns with the volunteer, with its parents and on his/her own (or possibly with siblings or friends).

Next, we wanted to know, whether the child knows anyone who is also included in the Education Support Programme. If so, we asked, whether he/she meets these children more often than before their participation in the programme.

A further set of questions focused on frequency how often the child's parents ask what happens at school, what are the child's grades or what is his/her behaviour at school. The same questions were asked again, just regarding the period before the child's participation in the programme. Also, we asked whether the child has a feeling that he/she improved at school (whether it does homework more often, is able to concentrate better during the classes and whether he/she receives less reprehensions).

Last but not least, to examine possible changes in relationships with the classmates, we wanted the child to name its friends from class and to tell where he/she meets their friends and what they do during the time they are together. This information could help us see, if the child is more friends with the children with good grades. However, for this we would need to match the grades of particular children and for that, a signed

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[18] Special schools are aimed at children with problems with school performance and/or school behaviour. Also, handicapped (or partly handicapped) children attend these schools. The class sizes in special schools are smaller and the children receive extra attention from the teachers.

approval from their parents was needed. Due to expected complications and lack of time during our research[19], we did not collect this data after all.

d) QUESTIONNAIRE FOR THE VOLUNTEER

This questionnaire included some basic information about the volunteer – his/her gender, age, completed education and current work or study areas. We also wanted to know, how long he/she has been cooperating with the organization People in Need, whether he/she plans to work in the future with children or as a social worker. Another area of interest was, whether the volunteer was active in any other NGO project, whether he/she plans to be active in such projects in the future and what was his/her motivation to help in this particular programme.

The second type of questions concerned tutoring. To begin with, we wanted to know whether the volunteer had some experience with any tutoring before, whether he/she was trained for his role of the tutor by his/her region coordinator from People in Need and whether he had the possibility to get to know the child's family and teachers. The questions from this area also focused on how many months the volunteer tutors the child, which school subjects the child is being tutored in and how many other children the volunteer tutors in total. We also asked how often the volunteer sees the child and how long the tutoring lasts on average per week.

Another set of questions inquired after the volunteer's activity during the tutoring, like whether he/she asks the child about problems at school, about his/her classmates or extra-school activities. Apart from this, we asked whether the volunteer asks the parents how they help their child with preparation for school (and possibly gives them some advice how to do that).

We also included a question, where the volunteers had to divide the time (in percentages) they spend at the child's home into time for the actual tutoring, time for questions on the child and parents about school and time for other activities[20].

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[19] we would need to first collect the questionnaires, then ask the parents of selected children for their approval and just then go to school and collect the data for them

[20] These may include playing with the children, etc.

The last set of questions dealt with the family. We were interested, whether the mother, father and siblings of the child were present and active during the tutoring, whether there are any cases that the volunteer comes to the family during an arranged time and the family or the child was not there. In addition, we asked whether the volunteer had some problems with the child's parents. Apart from this, we wanted to know, with whom the child lives in one household and what his/her mother's and father's job is. In this questionnaire as well, we included the fifteen OCEAN type of questions about the child's personality.

e) QUESTIONNAIRE FOR THE YOUNGER SIBLING(S)

We prepared a questionnaire for the child's younger sibling(s) who was in pre-school age (i.e. 3 to 6 years old[21]). This age interval was chosen, so that the sibling would be able to understand the questions asked and at the same time would be in the age that the parents should begin with his/her most basic preparation for school. In order to make these children more willing to answer our questions, we gave crayons to them.

The questionnaire included few games, where the child had to recognize colours, shapes and recite rhymes or sing songs it knows[22]. We also gathered information on whether the child had any toys at home that would improve its skills or whether the parents read fairy tales to the child. This way, we wanted to examine whether a change in the parents' attitude to education could be projected in the way they raise the younger siblings of the tutored child.

However, the data population for the group of younger siblings was too small to be able to extract any relevant results (16 children in treatment group, 4 in control group in all age categories).

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[21] Although we are aware of the wide age difference for such interval, which makes the comparing of the maturity of children very difficult, for a sufficiently great sample (dividing it into groups of children of the same age), we would be able to draw significant conclusions.

[22] The games are described in more detail in the Appendix at the end of the thesis.

3.3.4. GRAPHICAL OVERVIEW OF THE SAMPLE

We now include a brief graphical display of statistics about children (graphs A1-A6) and about volunteers (graphs B1-B6), that were derived from the questionnaires and serve as information on the sample as a whole.

Graph A1   Number of children according to age
Graph A2   Number of children according to gender
Graph A3   Number of children according to size of the family
Graph A4   Percentage of children attending special school
Graph A5   Percentage of children who repeated class

Graph B1   Answers to Yes/No questions for the volunteer
Graph B2   Percentage of volunteers according to gender
Graph B3   Percentage of volunteers according to age
Graph B4   Percentage of volunteers according to completed education
Graph B5   Percentage of volunteers according to the time they work for People in Need
Graph B6   Average division of time during the volunteer's visit at the family

A2 Number of children by gender

	treatment-term	treatment	control
male	5	31	10
female	3	35	6

A3 Number of children by size of the family

	treatment-term	treatment	control
large (more than 3 children)	4	25	4
small/medium (0-3 children)	4	19	12

A5 Percentage of children who attend special school

22% special
78% other

A6 Percentage of children that had to repeat class

36% had to repeat class
64% no repeated class

B1 The volunteer...

Legend: ■ no ■ yes

Item	no	yes
keeps in touch with other volunteers	8	27
would like to participate in a similar programme	9	26
plans to be engaged in ESP in the future	8	27
gives advice to parents, how they should help…	16	19
asks the parents how they help their child to…	19	16
helps the child with preparation for teste	5	30
helps the child with homework	1	34
asks about extra-school activities	5	30
asks the child about friends and classmates of the…	10	25
asks the child about problems with behaviour	10	25
asks the child about school during the tutoring	0	35
had the possibility to get to know the teacher of…	28	7
had the possibility to get to know the family of…	8	27
was trained by PIN	9	26
had experience with tutoring	13	22
is engaged in other programme where he worked…	31	4
is engaged in other programme where he worked…	26	9
is engaged in other programme aimed at…	32	3
worked in other NGO programme of other type	28	7
was engaged in other programme where he…	29	6
was engaged in other programme where he…	17	18
was engaged in other programme aimed at…	25	10
wants to work with children	10	25
wants to work as a social worker	17	18
wants to work as a teacher	25	10
studies	16	19
works	13	22

B2 Percentage of volunteers by gender

34%

66%

■ male   ■ female
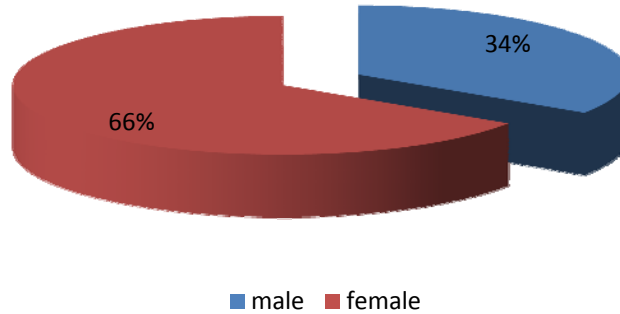
B3 Percentage of volunteers by age

24%

76%

■ up to 30   ■ more than 30
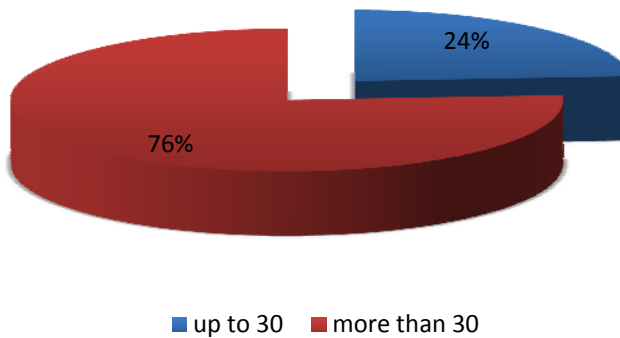
B4 Percentage of volunteers according to their completed education

■ primary   ■ secondary   ■ secondary vocational school   ■ university degree

11%

34%

9%

46%
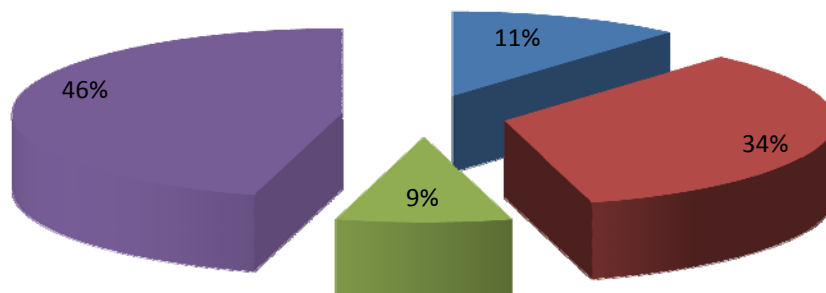
B5 How long the volunteer works for PIN

40% 31% 29%
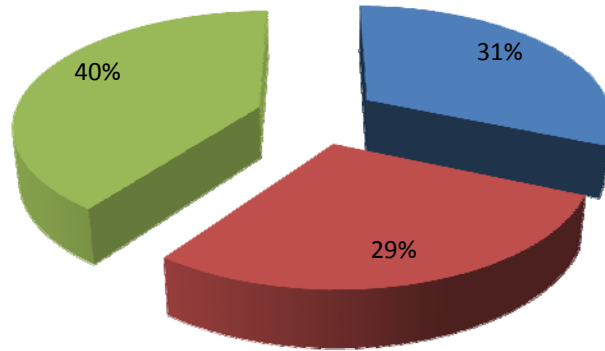
■ less than a year ■ 1-2 years ■ more than 2 years

B6 Average division of time during the volunteer's visit

14% 11% 75%
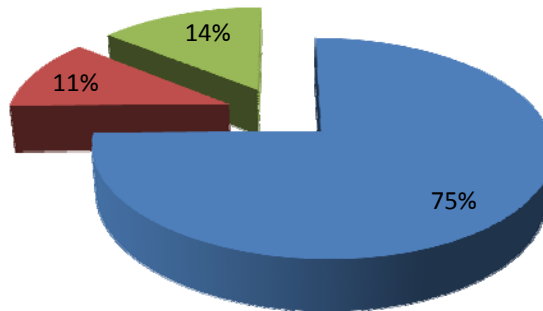
■ tutoring ■ questions ■ other

3.3.5. EXPERIENCED DIFFICULTIES

Regarding the difficulties we experienced during the research, they mainly dealt with the data sample. First of all, not all of the tutored children could be included in our treatment group. As we stated earlier, many of the tutored children attended first class during the time of our research and thus did not have the data history for the period before joining the programme. Also, there were several children who attended higher classes but still did not have the data history for the pre-programme period, as they were tutored since they began to attend the primary school.

Moreover, serious difficulties occurred when tracking the children for our primary control group. Either the families could not be contacted at all as they moved somewhere else, or the children's parents were not willing to provide a signed approval to collect the confidential data.

Most importantly, for some children, we managed to collect the data from schools but did not receive the questionnaires from the volunteers, or vice versa – we were able to collect the data from questionnaires, but the school refused to cooperate with us[23].

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[23] More than 20 primary schools refused cooperation as they did not consider the parents' signed approvals to be sufficient.

4. DATA ANALYSIS

At the beginning of this chapter, we introduce the difference-in-differences method that was conducted to evaluate the programme's true impacts. On the next pages, the reader can find the actual analysis of the researched data which was described previously. We structure the analysis according to the variables chosen from the data. An important part of this chapter deals with the results that the evaluation provided, showing the true effects of the Education Support Programme. The chapter is concluded by comprehensive tables and several graphs showing the exact numbers of the evaluation.

4.1. METHODOLOGY

Rigorous evaluations are an important way to determine how different programmes influence the lives of treated individuals, comparing their after-programme situation with the state were they not treated.

For evaluating the impact of the Education Support Programme, the first step for constructing the research design comprised of creating a suitable control group eliminating most of the possible selection bias. In the next step, we chose the difference-in-differences method for separating the true programme effects. In few words, this technique compares the differences in observed outcomes for periods before and after participating in the programme, including comparison with the control group.

In technical terms, the difference-in-difference estimate is derived as:

$$\widehat{DD} = [\hat{E}[Y_1^T|T] - \hat{E}[Y_0^C|T]] - [\widehat{E}[Y_1^C|C] - \hat{E}[Y_0^C|C]]$$

Where:

$\widehat{DD}$ denotes the observed average true impact of the programme

Y denotes outcome for the children, the upper index shows, whether the child was treated (T) or not (C), the lower index identifies the period when the outcome was observed, 0 denoting period when the child was not exposed to the programme, 1 meaning time when the child participated in the Education Support Programme.

C, T   denote assignment of the individual to control or treatment group

The difference-in-differences term provides an unbiased estimate under the assumption that

$$[\widehat{E}[Y_1^C|T] - \hat{E}[Y_0^C|T]] = [\widehat{E}[Y_1^C|C] - \hat{E}[Y_0^C|C]],$$

The equality in fact means that we assume statistical similarity of both groups (we assume, that their suitability for tutoring is alike as the both groups follow parallel trends in the outcomes).

The difference-in-differences method was applied on analysing effects on school averages, change in school averages relative to the average classmate, change in excused and unexcused absences, educational measures and grade for behaviour, running the regression

$$Y = \beta_0 + \beta_1 G + \beta_2 P + \beta_3 (G*P),$$

where Y denotes the observed variable, G denotes a dummy for being in the treatment group (G=1) or being in the control group (G=0), P denotes a dummy for outcome observed in the period before the programme (P=0) or after the programme (P=1). The dummy G*P then equals to 1, if the outcome is observed for the treated child in the period after his/her start of the tutoring.

For the difference-in-differences method, it was necessary to identify periods before and after the programme implementation for both groups: treatment and control. As the treated children entered the programme in different school half-years (ranging from 5 to 35 months, i.e. 1 to 7 school half-years before the end of the research period), it was not possible to discern the exact school half-years before and after implementing the programme for the primary control group as a whole. However, we were able to identify these periods for the secondary control group (as the data was compared to the child's actual classmates that received same education at school).

The difficulty with the primary control group was solved by dividing its data into pre- and post-programme period according to the average time of the tutoring for the children from the treatment group (being 20 months, i.e. 4 school half-years before the end of the research period). Also, we performed robustness checks by running the same regressions, only dividing the primary control group into period before/after the longest tutored child (35 months) joined the programme and before/after the shortest tutored child (5 months) joined the programme.

We also compared how much does the child like to go to school, however, we only compute simple differences (unpaired t-tests) as we have no data on how the situation was for control children in the past. Also, the simple t-test technique was used to compare the frequency and number of hours the parents devote to the questions on child about school.

4.2. ANALYSED DATA

Although we collected a wide range of data, only a part of them was actually analysed. This was caused by the very small number of children, for whom all the desired information was collected. Like we mentioned earlier, the questionnaire for the teacher included many questions on the period before the child's participation in the programme and most of the teachers were not able to answer them. Also, in the end, the questionnaires for the younger sibling(s) of the child were not evaluated, as we were able to collect only a small number of them. Moreover, these questionnaires were filled in for children in a wide age range (3, 4, 5 and 6 years old), leaving us no room to analyse the data for comparable subgroups.

4.2.1. INTERESTING FACTS

Before turning to the answers on our research questions, let us mention some interesting facts that we found out about the data population.

On the graph below, you may observe the difference in personalities of children from control and treatment groups. Were the findings confirmed on a larger sample (we only had this information about 41 treated children from the questionnaire for the volunteer and for 4 children from the control group from the questionnaire for the teacher), we may say that the personalities of tutored and non-tutored children differ significantly in two factors – neuroticism and agreeableness. The similarity of our control and treatment groups differs in the way they handle stress (tutored children being less neurotic as the control children) and in the way they treat others (tutored children being twice as agreeable as the control children).
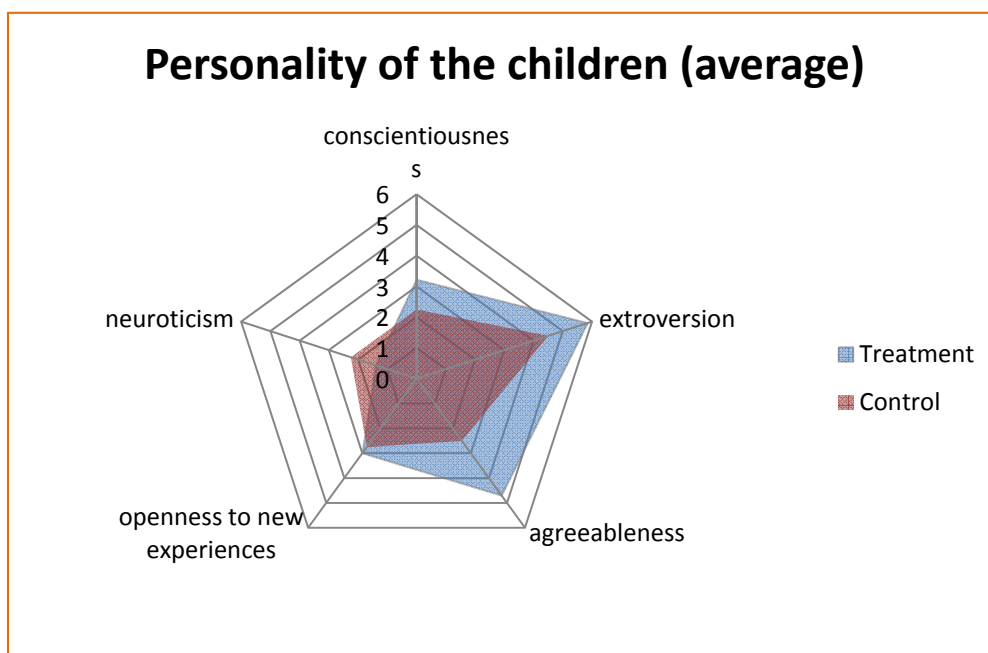
This raises a suspicion of the presence of selection bias. On the other hand, similar average personalities may be observed with regard to the child's extroversion and openness to new experiences. However, we may not draw significant conclusions due to the small sample size, especially small size of the compared control group.

4.2.2. RESULTS

We analyse the main impacts on children according to the research questions they answer. As we already mentioned, we collected data for 682 children from the secondary control group and for 16 children from the primary control group. However, the latter includes only 8 children with information from their school reports. Therefore, the data from schools are evaluated for both of these groups separately, with more reliable results (due to larger data population) in the comparison with the secondary control group.

For the primary control group, we were able to perform the analysis for girls and boys and children from large and small/medium families. For this group, however, we were not able to disentangle the effects according to the particular time period after the programme (comparisons half year after, one year after and more than one year after treated children joined the programme)[24]. We therefore only analyse effects of the programme in the periods before and during/after participation of the treatment group.

The opposite is true for the secondary control group – we do not have information about gender and size of the family these children come from. These analyses could not be conducted as the data for the classmates were collected anonymous. Therefore, we did not analyse the data for mentioned subgroups. On the other hand, as this control group receives the same education as the treatment group, we were able to identify the periods before, half year after, one year after and more than one year after the tutored child had joined the programme. In the regressions, we controlled for the fixed class effects.

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[24] As we already mentioned, the main problems were with identifying the most appropriate pre- and post-programme period for the control group. The robustness checks do not show significantly different results for other division of these periods. Please note that in the analysis we solely describe the evaluation for division of these periods according to the average length of being tutored (i.e. 20 months, or 4 school half-years).

4.2.2.1. EFFECTS ON CHILDREN'S ATTITUDE TOWARDS EDUCATION

Comparison with the secondary control group

- *Grades for behaviour* (exact numbers available in Table C6a[1]): Half year after participating in the programme, the grades for behaviour worsened by 0.139 for the treated children. Taking into account the change that happened for the classmates (increase by 0.03), the true increase amounted 0.109. One year after joining the programme, the situation changes. Although the grade for behaviour increased for the treated children by 0.017, their classmates' grades increased even more (by 0.031). Therefore, the difference-in-differences shows actual fall (improvement by 0,014) in the grades for behaviour. In the period more than one year after joining the programme, the grade for behaviour was improved only by 0.011 compared to the period before being tutored (difference for schoolmates 0.039, for the treated children 0.028). However, the data cannot reject the hypothesis that all the true changes are significantly different from zero.

- *School average* (exact numbers available in Table C6a[2]): The data show similar pattern as for the previous variable. Half year after joining the programme, the grades for the treated children worsened by 0.155 and for their classmates by 0.103. Hence, the actual difference for the treated children meant an increase by 0.052. One year after joining the programme, the grades for the treated children slightly improved (by 0.008). For the secondary control group, however, the grades were worsened by 0.168, which results in the actual improvement of the school average of the treated children by 0.176. More than one year after joining the programme, the grades improved (compared to the period before tutoring) by 0.033 whereas for schoolmates, this period brought an increase of their school average by 0.168. The true impact more than one year after the joining the programme was an improvement by 0.294, even more than one year after starting the tutoring.

- *School absence* (exact numbers available in Table C6a[3-5]): Firstly, we shall look at the changes in absenteeism for the children in general. Then we compare the results for the excused and unexcused absences separately. Half year after joining the programme, the treated children attended on average 29.031 less school lessons then before the tutoring. Although his/her classmates attended on average 5.7 classes more in this period, the true

impact (significant with 90% probability) still shows an increase in school absenteeism by 23.331 lessons half year after joining the programme. Looking at the period one year after the tutoring, the situation largely improves. The treated children attended in fact 1.685 lessons more than before the programme, whereas in the same period, their classmates attended 12.187 lessons less. The difference-in-differences method then shows the true effect being an improvement in school absenteeism by 13.872 lessons on average. More than one year after the programme, the attendance increases even more (by 16.72), compared to a difference 7.259 absent lessons more for the classmates. The true change is then (with 90% probability) represented by 23.979 attended lessons more for the treated children.

Looking at the excused and unexcused absence separately, they all show similar trends: Half year after joining the programme, the difference-in-differences method shows actual increase in school absence. In the next periods, however, the treated children attend school more and more – an actual improvement of excused absence by 12.601 and 22.651 for the periods one year and more than one year after joining the programme, respectively. The unexcused absence improved one year after the start of tutoring by 1.271 and by 1.327 more than one year after the tutoring.

- *Educational Measures* (exact numbers available in Table C6a[6]): Again, half year after joining the programme, the school behaviour worsened by 0.724 points for the treated children. Taking into account the decrease by 0.437 points for the classmates' group, the true change half year after joining the programme amounts for worsening by 0.287 points. The situation significantly changes one year after joining the programme, when the treated children improve by 0.539, though their classmates have more reprehensions by 0.188 points. Therefore, the actual change for the treated children is improvement by 0.727 (significant at 95% level). Although more than one year after start of the tutoring, the educational measures improved only by 0.23 (compared to the period before the programme), their classmates received by 0.261 points more reprehensions. The true impact more than one year after joining the programme is thus an improvement in school behaviour by 0.491.

Comparison with the primary control group

- *Grade for behaviour* (exact numbers available in Table C5[1]): When we compare the behaviour grades of treated children with the children from the primary control group, we see that this grade increased for the treated children (by 0.047) and decreased for the control children (by 0.125) when we compare the periods before and after participation in the programme. The true difference is thus a worsened grade for behaviour by 0.172. Looking at girls and boys separately, the difference-in-difference shows an increase in the grades for behaviour for both groups, for girls smaller (0.091) than for boys (0.229). However, analysing groups of children from large families and small/medium families, we come to conclusion that the children from large families have increased grade by 0.216 (difference-in-differences), whereas children with less or none siblings improved their grades for behaviour, by 0.013 (again difference-in-differences). Still, for all these results we cannot reject the hypothesis that the true changes are zero.

- *School average* (exact numbers available in Table C5[2]): When analysing the school averages before and after joining the programme, we find that this worsened for both groups: control (by 0.334) and treatment (by 0.045). However, the control group worsened even more, thus the actual impact of the programme on school average amounts for an improvement by 0.289. The treated girls improved after joining the programme by 0.048. Compared to the worsened grades for the control girls (by 1.124), the actual impact of the programme on girls meant an improvement by 1.172. For boys, the effect was opposite – they themselves worsened by 0.183, whereas their classmates-boys improved by 0.158. The resulting difference thus shows a worsened school average for boys by 0.341. The division on children from large and small/medium families also shows opposite results. On one hand, for the children from large families, the actual impact of the programme meant improvement of their school average by 0.497. On the other hand, the children from small/medium families slightly worsened their school average by 0.014 (again difference-in-differences).

- *School absence* (exact numbers available in Table C5[3-5]): The treated children missed on average 7.155 lessons more than before the programme. The children from control group, however, attended on average 16.625 lessons less than in the period before. Thus the final difference-in-difference shows an improvement in school attendance of these children by 9.47 lessons on average. For the girls, the difference-in-differences is even

larger, amounting 16.08 attended lessons more. Boys on the other hand increased their actual school absenteeism by 9.74 lessons on average (difference-in-differences). The true change in school absenteeism differs also according to the size of the families the children come from. For children with three or more siblings, their actual school attendance decreased by 4.022 lessons on average (difference-in-differences), whereas the children from small families come to school more often (by 4.469 lessons on average, again difference-in-differences).

When we look at excused and unexcused absence separately, the results for excused lessons and absence in general are parallel. A different trend is observed for the unexcused absence, though. Here, the difference-in-differences method shows decreased attendance for all subgroups except the children from small/medium families, whose unexcused absence decreased by 0.313 (difference-in-differences). However, for none of these results, the hypothesis about zero change could be rejected.

- *Educational measures* (exact numbers available in Table C5[6]): The treated children received 0.049 points more after participating in the programme, whereas for the same period, the control children worsened by 0.125 points on average. Thus the true difference meant an improvement by 0.174 points. The difference-in-differences also shows improvement for girls (by 0.142 points), boys (by 0.077 points) and children from small/medium families (by 0.219 points). Only the subgroup of children with three or more siblings shows decrease in number of points by 0.075 (difference-in-differences).

- *Learning on his/her own* (exact numbers available in Tables C1[2], C2[2]): In the questionnaires for children, we wanted to know, how frequently and how many hours on average per week the child learns on his/her own. We find mean frequency (measured on a scale 1=not at all,...,6=every day) 3.292 for treated children and 3.188 for the control children, thus the treated children learn by 0.105 points more frequently. The frequency for girls is smaller for the treated children, whereas tutored boys learn more often. Also, the children from large families learn less often (by 0.914) than their control peers. On the other hand, the children from small or medium families learn by 0.306 more than children from such families from the control group.

As for the number of hours, the treated children learn by 0.18 hours on average per week more than control children. Similar trends (only with smaller differences with the control

group) are observed for all subgroups. However, we cannot confirm that these differences are significantly different from zero.

- *Liking school* (exact numbers available in Table C4): Another piece of information from the questionnaires for children showed how much the child likes to go to school and how much the treated children liked to go to school before joining the programme. We observe an increase from 2.61 before the programme to 2.766 after the programme for the treated children in total (on a scale 1=not at all,...,4=very much), whereas the control children's mean amounts for 2.625. Currently, the treated children hence like to go to school more by 0.156 compared to their peers from the control group. Before joining the programme, the subgroups boys and children from large families liked to go to school less than their peers from the control group. However, after joining the programme, all subgroups like to go to school more than children from the control group.

4.2.2.2. EFFECTS ON PARENTS' ATTITUDE TOWARDS EDUCATION

The main source of information about this area provided questionnaires for control and treated children about the parents' interest in their child's education. Concretely, we analysed answers on questions: "How frequently/ how many hours on average per week the parents learn with the child? How frequently on average parents ask their child about what happens at school, about the child's grades, school behaviour and school attendance?"

- *Learning with parents* (exact numbers available in Tables C1[1], C2[1]): On average, the treated children learn by 0.066 less frequently with their parents (on a scale 1=not at all, 6=every day), with mean 3.246 compared to the mean for control group 3.313. Girls and children from small/medium families also learn with their parents less often, whereas boys learn more often (by 0.148) and children from large families even more (by 1.75), the latter statistically significant on 99 % level.

  As for the number of hours the children learn with their parents on average per week, only children from large families learn more than their peers from control group (by 1.058 confirmed at 95 % confidence level). All other subgroups and also analysing this area in total show less hours that the parents spend helping their children with learning. However, we cannot reject the hypothesis that these differences are significantly different from zero.

- *Questions of parents* (exact numbers available in table C3[1-4]): Compared to the periods before and after joining the programme (on the scale from 1=not at all to 4=every day) the parents of the tutored children asked more often what happened at school (by 0.236), what are the child's school grades (by 0.176) and school behaviour (0.114) and whether the child goes to school (by 0.104). The only type of questions that the parents of the tutored children ask more than parents of the control children, are the questions about grades. Except for girls (where the difference of after-treatment situation compared to the control group is represented by less frequent questions by 0.058), for all remaining subgroups and also for children in total, the parents of tutored children ask their children more often about school grades that the parents of control children.

4.2.3. MAIN GRAPHS AND TABLES WITH RESULTS

This chapter contains main graphs and tables depicting the numerical results of our analysis. In each table, you may find an explanation on which method of analysing the variables was used. Also, please note, that in the tables, * means 90% statistical significance of the difference, ** mean 95% statistical significance and *** mean 99% statistical significance. In the tables comparing treatment and secondary control groups, the term fixed class shows that we controlled for the classes during the difference-in-differences regression.

List of included graphs and tables:

Table C1   How often does the child learn with his/her parents/ on his/her own? (t-tests results)
Table C2   How many hours does the child learn with his/her parents/ on his/her own? (t-tests results)
Table C3   How often do parents ask about school? (t-tests results)
Table C4   How much does the child like to go to school? (t-tests results)
Table C5   Regression parameters – Difference-in-differences method for treatment and primary control groups
Table C6a   Regression parameters – Difference-in-differences method for treatment and secondary control groups
Graph C6b   Average grades for treatment and secondary control groups
Graph C6c   Difference-in-differences for average grades (comparing treatment and secondary control groups)
Graph C6d   Average absence (total) for treatment and secondary control groups
Graph C6e   Difference-in-differences for average absence (comparing treatment and secondary control groups)
Graph C6f   Average educational measures for treatment and secondary control groups
Graph C6g   Difference-in-differences for average educational measures (comparing treatment and secondary control groups)

Table C1   **How many days (on average per week) the child learns...?** (method: unpaired t-tests)

(1=not at all,...,6=every day)

	control					treatment				
	total	girls	boys	large family	small/ medium family	total	girls	boys	large family	small/ medium family
[1]...with parents	3,313	3,167	3,4	1,25	4	3,246	2,971	3,548	3	3,444
st.dev	(1,922)	(1,941)	(2,011)	(0,5)	(1,706)	(1,768)	(1,784)	(1,729)	(1,89)	(1,664)
n	16	6	10	4	12	65	34	31	29	36
diff (T-C)						-0,066	-0,196	0,148	1,75	-0,556
signif									***	
[2]...on his/ her own	3,188	4	2,7	4,5	2,75	3,292	3,324	3,258	3,586	3,056
st.dev	(1,87)	(2)	(1,703)	(2,38)	(1,545)	(1,548)	(1,683)	(1,413)	(1,547)	(1,53)
n	16	6	10	4	12	65	34	31	29	36
diff (T-C)						0,105	-0,676	0,558	-0,914	0,306
signif										

Table C2   **How many hours (on average per week) the child learns...?** (method: unpaired t-tests)

	control					treatment				
	total	girls	boys	large family	small/ medium family	total	girls	boys	large family	small/ medium family
[1]...with parents	2,563	1,823	3,25	0,25	3,333	1,983	1,417	2,161	1,308	2,515
st.dev	(0,914)	(0,397)	(4,455)	(0,5)	(3,945)	(0,285)	(0,554)	(2,19)	(1,755)	(2,37)
n	16	6	10	4	12	59	31	28	26	33
diff (T-C)						-0,58	-0,406	-1,089	1,058	-0,818
signif									**	
[2]...on his/ her own	1,817	1,583	1,972	2,375	1,614	1,997	1,983	2,012	2,38	1,707
st.dev	(1,853)	(1,2)	(2,245)	(2,287)	(1,751)	(1,84)	(1,845)	(1,869)	(2,142)	(1,546)
n	15	6	9	4	11	58	30	28	25	33
diff (T-C)						0,18	0,04	0,04	0,005	0,093
signif										

Table C3 — **How frequently (on average) parents ask their child about...?** (method: unpaired t-tests)

(1=not at all, 2=rarely, 3=often, 4=every day)

	control					treatment before					treatment now				
	total	girls	boys	large family	small/medium family	total	girls	boys	large family	small/medium family	total	girls	boys	large family	small/medium family
[1]...what happens at school	3,375	3,333	3,4	2,75	3,583	2,887	2,929	2,84	2,731	3,037	3,123	3,088	3,161	2,931	3,278
st.dev	(0,806)	(0,816)	(0,843)	(0,957)	(0,669)	(1,013)	(0,979)	(1,068)	(1,116)	(0,898)	(0,96)	(0,933)	(1,003)	(1,067)	(0,849)
#	16	6	10	4	12	53	28	25	26	27	65	34	31	29	36
diff (T_1-T_0)											0,236	0,16	0,321	0,2	0,24
diff (T-C)						-0,488	-0,405	-0,56	-0,019	-0,546	-0,252	-0,245	-0,239	0,181	-0,306
signif						**		**		**					
[2]...grades	3,25	3,333	3,2	3	3,333	3,132	3,143	3,12	3,038	3,222	3,308	3,265	3,355	3,241	3,361
st.dev	-0,931	(0,816)	(1,033)	(0,816)	(0,985)	(0,856)	(0,891)	(0,833)	(0,824)	(0,892)	(0,09)	(0,129)	(0,709)	(0,689)	(0,762)
#	16	6	10	4	12	53	28	25	26	27	65	34	31	29	36
diff (T_1-T_0)											0,176	0,121	0,235	0,203	0,139
diff (T-C)						-0,12	-0,19	-0,08	0,04	-0,11	0,058	-0,069	0,16	0,24	0,03
signif															
[3]...school behaviour	3,063	3	3,1	2,75	3,167	2,745	2,577	2,92	2,64	2,846	2,859	2,647	3,1	2,929	2,806
st.dev	(1,123)	(1,095)	(1,197)	(1,258)	(1,115)	(0,913)	(0,945)	(0,862)	(0,86)	(0,967)	(0,974)	(1,07)	(0,803)	(0,858)	(1,064)
#	16	6	10	4	12	51	26	25	25	26	64	34	30	28	36
diff (T_1-T_0)											0,114	0,070	0,180	0,289	-0,040
diff (T-C)						-0,317	-0,423	-0,18	-0,11	-0,321	-0,203	-0,353	0	0,179	-0,361
signif															
[4]...whether the child goes to school	3,813	3,833	3,8	3,5	3,917	3,481	3,333	3,64	3,48	3,481	3,585	3,471	3,71	3,483	3,667
st.dev	(0,403)	(0,408)	(0,422)	(0,577)	(0,289)	(0,671)	(0,734)	(0,569)	(0,653)	(0,7)	(0,403)	(0,706)	(0,461)	(0,738)	(0,478)
#	16	6	10	4	12	52	27	25	25	27	65	34	31	29	36
diff (T_1-T_0)											0,104	0,137	0,070	0,003	0,185
diff (T-C)						-0,33	-0,50	-0,16	-0,02	-0,44	-0,23	-0,36	-0,09	-0,02	-0,25
signif						***	**			***	**	*			**

Table C4   **How much does the child like to go to school?** (method: unpaired t-tests)

(1=not at all, 2=he/she does not care, 3=much, 4=very much)

	control					treatment before					treatment now				
	total	girls	boys	large family	small/ medium family	total	girls	boys	large family	small/ medium family	total	girls	boys	large family	small/ medium family
mean	2,625	3	2,4	3	2,5	2,61	2,667	2,538	2,63	2,594	2,766	2,939	2,581	2,931	2,629
st.dev	(1,31)	(1,265)	(1,35)	(1,155)	(1,382)	(1,017)	(0,957)	(1,104)	(1,149)	(0,911)	(0,938)	(0,788)	(1,057)	(1,033)	(0,843)
#	16	6	10	4	12	59	33	26	27	32	64	33	31	29	35
diff (T-C)						-0,015	-0,333	0,138	-0,370	0,094	0,141	-0,061	0,181	-0,069	0,129
diff (T_1-T_0)											0,156	0,272	0,043	0,301	0,035
signif															

Table C5   **Regression Parameters** (Comparison of the treatment and primary control groups):

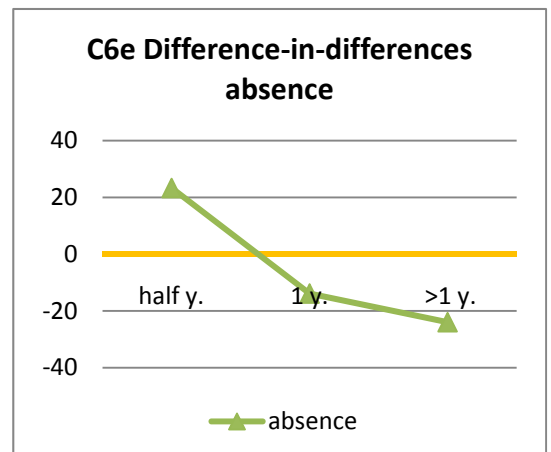|	total				girls				boys				large family				small/medium family			
	const	period	group	diff-in-diff	const	period	group	diff-in-diff	const	period	group	diff-in-diff	before	diff	before	diff-in-diff	before	diff	before	diff-in-diff
[1] grade for behaviour	1,125	-0,125	-0,1	0,172	1	0	0	0,091	1,25	-0,250	-0,18	0,229	1,125	-0,125	-0,125	0,216	1	0	0,063	-0,013
st.dev	(0,099)	(0,117)	(0,1)	(0,123)	(0,15)	(0,211)	(0,16)	(0,219)	(0,126)	(0,141)	(0,14)	(0,152)	(0,097)	(0,14)	(0,11)	(0,146)	(0,085)	(0,085)	(0,1)	(0,064)
n	7	7	55	62	2	2	33	35	5	5	22	27	4 ***	4	32	36	3 ***	3 ***	23	26
R²	0,0441				0,0888				0,1257				0,1078				0,0172			
[2] average	1,555	0,334	0,473	-0,289	1,36	1,124	0,682	-1,172	1,75	-0,158	0,255	0,341	1,555	0,556	0,52	-0,497	1,67	0	0,30	0,014
st.dev	(0,425)	(0,49)	(0,45)	(0,52)	(0,584)	(0,715)	(0,61)	(0,747)	(0,622)	(0,695)	(0,67)	(0,751)	(0,445)	(0,58)	(0,49)	(0,623)	(0,333)	(0,333)	(0,39)	(0,252)
n	8	8	55	63	3	3	33	36	5	5	22	27	5 ***	5	32	37	3 ***	3 ***	23	26 **
R²	0,029				0,0752				0,3876				0,045				0,0326			
[3] absence	95,875	16,625	-14,3	-9,47	78	17,5	17,14	-16,08	113,75	7,25	-53,6	9,74	95,88	12,29	-22,7	4,022	116,8	0	-24,86	-4,469
st.dev	(31,98)	(36,9)	(33,7)	(39,147)	(47,92)	(58,69)	(50,1)	(61,295)	(40,16)	(44,9)	(42,9)	(48,515)	(31,99)	(41,3)	(35,0)	(31,99)	(27,3)	(27,3)	(32,0)	(20,7)
n	8	8	55	63	3	3	33	36	5	5	22	27	5 ***	5	32	37	3 ***	3 ***	23	26
R²	0,0353				0,0045				0,2245				0,0499				0,0402			
[4] excused absence	95,875	16,625	-14,5	-10,541	78	17,5	16,91	-16,875	113,75	7,25	-53,6	8,257	95,88	12,29	-22,7	1,988	116,8	0	-25,18	-4,156
st.dev	(32,0)	(33,7)	(33,7)	(39,125)	(47,7)	(58,4)	(49,8)	(60,998)	(40,4)	(45,2)	(43,2)	(48,83)	(32,0)	(41,4)	(35,1)	(44,825)	(27,2)	(27,2)	(31,9)	(20,649)
n	8	8	55	63	3	3	33	36	5	5	22	27	5 ***	5	32	37	3 ***	3 ***	23	26
R²	0,0361				0,004				0,225				0,0472				0,0404			
[5] unexcused absence	0	0	0,139	1,071	0	0	0,227	0,795	0	0	0	1,483	0	0	0	2,03	0	0	0,313	-0,313
st.dev	(2,104)	(2,43)	(2,22)	(2,575)	(1,773)	(2,171)	(1,85)	(2,267)	(4,27)	(4,775)	(4,57)	(5,16)	(2,7)	(3,48)	(2,95)	(3,771)	(0,28)	(0,28)	(0,33)	(0,213)
n	8	8	55 *	63	3	3	33	36	5	5	22	27	5	5	32	37	3	3	23	26
R²	0,0352				0,0582				0,0338				0,0715				0,09			
[6] educ. measures	0	-0,125	-0,167	0,174	0	0	-0,2	0,142	0	-0,167	-0,107	0,077	0	0	-0,125	-0,075	-0,25	0	0,031	0,219
st.dev	(0,604)	(0,74)	(0,64)	(0,78)	(1,09)	(1,542)	(1,14)	(1,595)	(0,47)	(0,545)	(0,5)	(0,587)	(0,39)	(0,55)	(0,42)	(0,587)	(0,84)	(0,84)	(0,94)	(0,529)
n	6	6	52	58	2	2	31	33	4	4	21	25	4	4	30	34	2	2	22	24
R²	0,0016				0,0048				0,0135				0,016				0,0098			

Table C6a — **Regression parameters** (comparison with the secondary control group)

	compared half year after				compared 1 year after				compared more than one year after			
	const	period	group	diff-in-diff	const	period	group	diff-in-diff	const	period	group	diff-in-diff
[1] behaviour	1,08	0,031	0,031	0,109	1,043	0,031	0,028	-0,014	1,043	0,039	0,028	-0,011
st.dev	(0,03)	(0,017)	(0,05)	(0,067)	(0,037)	(0,021)	(0,046)	(0,063)	(0,033)	(0,022)	(0,041)	(0,059)
n				723				674				605
	***	*			***				***	*		
R²			0,0686				0,0741				0,0973	
fixed class	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
[2] average	1,676	0,103	0,529	0,052	1,493	0,168	0,522	-0,176	1,493	0,261	0,524	-0,294
st.dev	(0,068)	(0,038)	(0,114)	(0,152)	(0,089)	(0,051)	(0,11)	(0,151)	(0,094)	(0,063)	(0,117)	(0,168)
n				723				674				605
	***	***	***		***	***	***		***	***	***	*
R²			0,313				0,3488				0,317	
fixed class	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
[3] absence	53,653	5,7	28,038	23,331	54,67	12,187	29,144	-13,872	54,691	7,259	28,594	-23,979
st.dev	(5,879)	(3,324)	(9,85)	(13,164)	(7,449)	(4,239)	(9,207)	(12,58)	-7,256	-4,863	-8,97	-12,9
n				723				674				605
	***	*	***	*	***	***	***		***		***	*
R²			0,1665				0,1532				0,1933	
fixed class	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
[4] exc. abs.	53,793	5,109	28,071	18,87	54,57	10,345	29,257	-12,601	54,59	6,339	28,713	-22,651
st.dev	(5,793)	(3,276)	(9,707)	(12,973)	(7,239)	(4,119)	(8,947)	(12,226)	(7,128)	(4,778)	(8,812)	(12,673)
n				723				674				605
	***		***		***	**	***		***		***	*
R²			0,1906				0,1479				0,1776	
fixed class	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
[5] unexc. abs.	-0,139	0,59	-0,033	4,462	0,1	1,842	-0,112	-1,271	0,101	0,92	-0,119	-1,327
st.dev	(0,58)	(0,328)	(0,971)	-1,298	(1,105)	(0,629)	(1,366)	(1,105)	(1,079)	(0,723)	(1,334)	(1,918)
n				723				674				605
		*		***		***						
R²			0,1331				0,0916				0,0846	
fixed class	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
[6] educ. measures	-0,887	-0,437	-0,235	-0,287	-0,615	-0,188	-0,229	0,727	-0,615	-0,261	-0,228	0,491
st.dev	(0,161)	(0,091)	(0,27)	(0,361)	(0,192)	(0,109)	(0,237)	(0,324)	(0,183)	(0,123)	(0,226)	(0,326)
n				723				674				605
	***	***			***	*		**	***	**		
R²			0,225				0,2516				0,2212	
fixed class	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

Graphs derived from comparison with the secondary control group:

In the graphs, the zero axis is marked by orange colour. If the difference-in-differences lines drop below this level, it means that the children's grades and absence lowered, thus improved. However, for the educational measures, dropping below this line means worsened behaviour (as the minus points in our system are assigned in case of reprehension and plus points in case of appraisal).

C6b Grade average

control — treatment

C6c Difference-in-differences grades

grade average

C6d Absence

control — treatment

C6e Difference-in-differences absence

absence

C6f Educational measures

control — treatment

C6g Difference-in-differences educational measures

educational measures
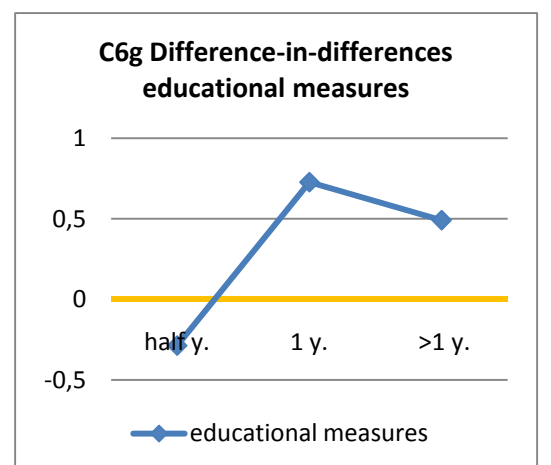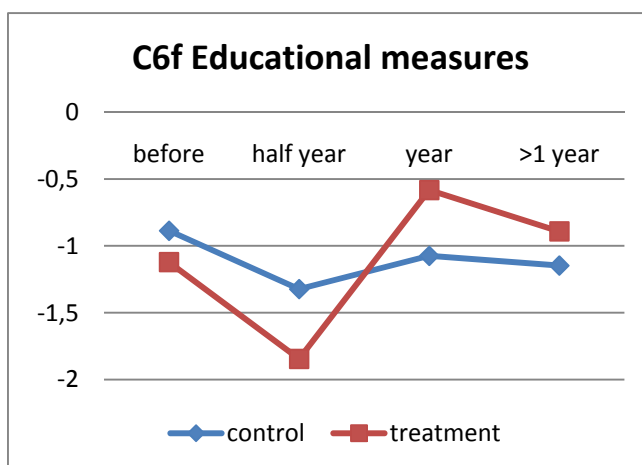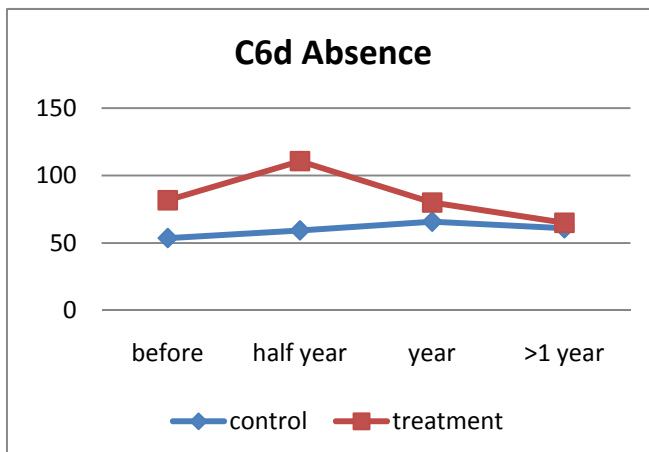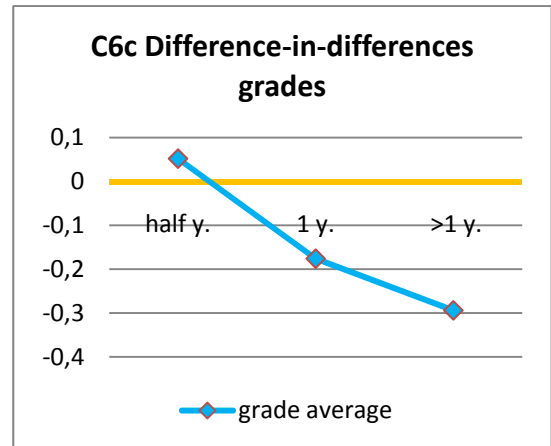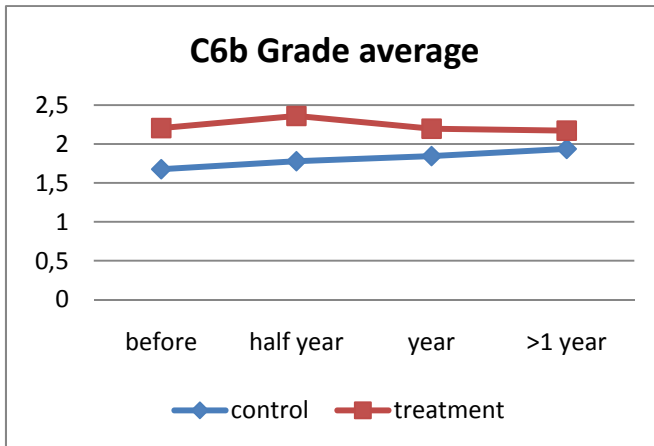
5. CONCLUSIONS

In this thesis, we describe evaluation of the Education Support Programme in detail. As the programme's goals were set on improving the children's school performance and helping parents see the importance of education, we analysed two effects – a change of child's attitude to education and a change of his/her parents' attitude to education. For the analysis, we used two main sources of data – data from school reports and data from questionnaires which were prepared for the child, his/her younger siblings in the pre-school age, teacher and volunteer.

Three main groups of children were analysed – a treatment group, a primary control group (consisting of children which should be exposed to the programme but were not due to lack of volunteers) and a secondary control group (consisting of classmates of the children from the treatment group). Using the difference-in-differences method, we were able to disentangle the true impacts that the programme had on treated children.

When comparing the data from school between treatment and secondary control groups, we find that for all the observed variables (grades for behaviour, average grades, school absence in total, excused absence, unexcused absence and educational measures), the children's performance worsened half year after joining the programme, but improved greatly afterwards (analysed for periods one year and more than one year after joining the programme)[25]. For educational measures, the improvement one year after joining the programme was greater than for the period more than one year after the tutoring started. Still, we observed that the tutored children received less reprehension and more appraisals than their classmates.

Another analysis focused on comparison of treatment and the primary control groups. In this evaluation, apart from looking at the whole groups in total, we also looked for patterns for subgroups according to gender and size of the families. We found that for boys, most of the observed variables actually worsened after joining the programme (apart from educational measures which improved). Most variables (except school average) worsened also for the children from large families. However, if we look at the results in total, the grade for behaviour together with the unexcused absence worsened, whereas the school average, absence in total

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[25] This result raises a suspicion that the data was „contaminated" by the children who were exposed to the programme only for one school half-year and had worse grades, whilst it may be possible that they would not improve in future periods. However, after excluding them from the data sample, no change in the trends occurred. The other children were again worse half year after the start of the tutoring and better in later periods.

and educational measures improved. On the other hand, we shall keep in mind that the primary control group included only a small sample of children and none of these results proved to be significantly different from zero.

As for the data from questionnaires, we find that the children learn generally less with their parents (apart from children from large families who learn more in comparison with the control group) and they generally learn more on their own.

The parents ask less about what happens at school, what their child's school behaviour is or whether the child goes to school. On the other hand, they generally ask questions about the child's grades more often. We observed that the children like to go to school more than before they joined the programme and mainly also in comparison with the primary control group. Again, due to the small samples, for many differences, we could not reject the hypothesis about its zero value.

As the small data sample restrained a more detailed analysis, we would highly recommend supporting the results with evaluation on a larger data population. Also, we leave many areas unexplored due to retrospective character of the research. For future analyses we would therefore recommend developing tools that would allow such ex post analysis. For example, these could include questionnaires for children and their teachers at the moment of joining the programme. This need not be financially demanding and would prepare a good material for future evaluation. Also, exploring the effects of the programme on regular basis (e.g. yearly) would bring valuable information about its development. The basis for such researches is already laid with this evaluation.

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7. APPENDIX

D1 QUESTIONNAIRE FOR CHILDREN (treatment group)

Research Assistant ....

Date:.. Town:...

School:…………………………………………………… Class:……………….........................

Name of the child:………………………………………………………………….......................

1) Gender: boy girl

2) Age: ……. years

Date of birth: …………………………………

3) Year of education (including this year and all the repeated classes): ………………………

4) The child had to repeat grade:

 no
 yes, ……………………………………………………………………………………
 ………………………………………………………………………………………

(write all grades that were repeated and corresponding classes)

5) The child attended other school before:
 yes no

6) The child attends special school:
 no
 yes, for …………months (………… years)

7) Do you have any siblings? yes no not sure

8) How many sisters do you have? ……………………
Age of the sisters:………………………………………………………………

9) How many brothers do you have? ……………………
Age of the brothers:. ……………………………………………………………

10) I ... in the tutoring programme:
 did not participate and did not want to participate
 have not participated but I wanted to
 have been participating for ... months
 participated for ... months, but I do not participate any more

11) Tutored subjects (mark all the relevant subjects):
 Czech Mathematics Geography Natural History
 History English German Physics
 Chemistry Civics other (write all): ……………………………………

12) I learn with the volunteer:
 more than two days per week
 2 days per week
 1 day per week
 less than one day per week
I learn with the volunteer for ……. hours a week on average.

13) Parents (at least one of the parents) help me with learning:
    every day
    5-6 days per week
    3-4 days per week
    1-2 days per week
    less than one day per week
    not at all
I learn with my parents for ……. hours a week on average.

14) I learn on my own:
    every day
    5-6 days per week
    3-4 days per week
    1-2 days per week
    less than one day per week
    not at all
I learn on my own for ……. hours a week on average.

15) Extra-school activities (mark all that are relevant):
- club:

music	sports
educational	creative writing
theatre	tourist
graphomotor skills	other club organized by PIN

    other (write all):……………………………………………………

- helping at home:

cooking	wiping the dust
siblings' babysitting	helping in the garden
carrying out the rubbish	caring for a pet

    other (write all):……………………………………………………

16) Hobbies (mark all that are relevant):

drawing	sports
playing with other children	reading
learning with the volunteer	watching TV
dancing	singing

    other: ………………………………

17) Who else participates in the programme? (mark all the relevant answers):
    sibling   someone else in the family   friend   other: ………………………

18) Other children participating in the programme   :
    I meet them more than before their participation in the programme
    I meet just as much as before their participation in the programme
    I meet less than before their participation in the programme

19) My parents:
- ask what we do at school
    every day   often   rarely   not at all
- ask about my school grades
    every day   often   rarely   not at all
- ask about my behaviour at school
    every day   often   rarely   not at all
- ask whether I go to school
    every day   often   rarely   not at all
- ask the teacher how I am doing at school
    every day   often   rarely   not at all
- ask the volunteer how I am doing at learning
    every day   often   rarely   not at all

20) Before joining the Education Support Programme, my parents:
- asked what we did at school
  every day   often   rarely   not at all
- asked about my school grades
  every day   often   rarely   not at all
- asked the teacher how I was doing at school
  every day   often   rarely   not at all
- asked about my behaviour at school
  every day   often   rarely   not at all
- asked whether I went to school
  every day   often   rarely   not at all

21) I like to go to school:
     very much   a lot   I do not care   not at all

22) Before joining the tutoring programme, I liked to go to school:
     very much   a lot   I did not care   not at all

23) I go to school, because:

Parents say I should go there	yes	no
I have to, although I do not like it	yes	no
I have friends there	yes	no
I have fun there	yes	no
It is better than being at home	yes	no
I want to learn and be educated	yes	no
When I grow up, I want to have a good job and the school enables that	yes	no

Other: …………………………………………………………………………………………………

24) What has changed in the school after joining the programme?:

I have better grades	yes	no
I do my homework more often	yes	no
I get less reprehensions from my teachers	yes	no
I understand better during classes	yes	no
I pay more attention during the classes	yes	no

25) At home I have ..... to learn:

own room	yes	no
own desk	yes	no
time and space to learn undisturbed	yes	no

26) My friends from school are (name all):……………………………………………………..................
………
………
………

27) My three best friends from school are:
1. ………………………………………………………
2. ………………………………………………………
3. ………………………………………………………

28) My best friends (mark all the relevant answers)
     I meet them at school
     I meet them outside school at my place
     I meet them outside school at their place
     I meet them outside school somewhere else

29)   When I am with my friends (mark all the relevant answers):
          we play
          we do sports
          we learn together
          we go to club together
          we talk about school
          we talk about our problems
          other: …………………………………………………………………………………

30)   Notes about the child:
          …………………………………………………………………………………… …………
          …………………………………………………………………………………………………

D2a QUESTIONNAIRE FOR THE YOUNGER SIBLING(S)

Research Assistant:…………………………………………………………………………

Date:…………………………… Town:……………………………………………………

Name of the younger sibling:……………..………………………………………… …….

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1) Name of the younger sibling:……………………………………………………………

         Gender: □ boy □ girl
         Date of birth: ……………………………………
         Age: ....……………………………………

2) Name of the child (older):………………………………………………………………
         Gender: □ boy □ girl
         Date of birth: ……………………………………
         Age: ……………………………………

3) The older sibling ... in the programme.
    did not participate and did not want to participate
    has not participated but he/she wanted to
    has been participating for ... months
    participated for ... months, but does not participate any more

4) The child recognized colour:
- Blue: □ yes □ no
- Green: □ yes □ no
- Yellow: □ yes □ no
- Brown: □ yes □ no

5) The child recognized shape:
- Circle: □ yes □ no
- Square: □ yes □ no
- Triangle: □ yes □ no

6) The child could recite/sing: Grade (1 – 5, 1 = very good)
□ a poem   ………………………
□ a rhyme   ………………………
□ a song   ………………………
The child is willing to recite/sing .... more.

7) The parents read fairy tales to the child: □ yes □ no
8) The child can introduce itself: □ yes □ no
9) The child can say where he/she lives: □ yes □ no

10) The child has at home:
□ colouring book
□ crayons
□ fairy tales books
    □ the child does know the content of these books
□ puzzles / lego

11) The child attends kindergarten: □ yes □ no

D2b THE GAME PLAYED WITH THE YOUNGER SIBLING

Firstly, the child received 6 colour pencils as a reward for playing the game. The volunteer asked him/her to show him a blue and green pencil. After that, the volunteer pointed at yellow and brown pencils and asked the child to tell the colour of the pencils. After the first "game", the volunteer put a sheet of paper with following shapes in front of the child. The younger sibling was supposed to answer the questions of type: "Where is a square? Where is a circle? Where is a triangle?" The last "game" demanded from the child to recite rhymes or sing children songs the child knows. Similar games are played with the children when the teachers test their maturity to enter the first class at school.
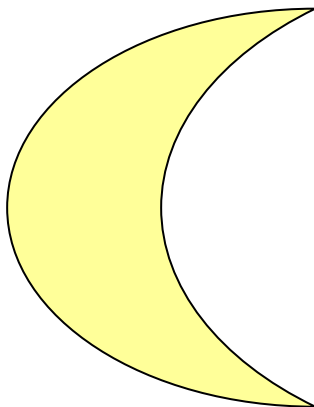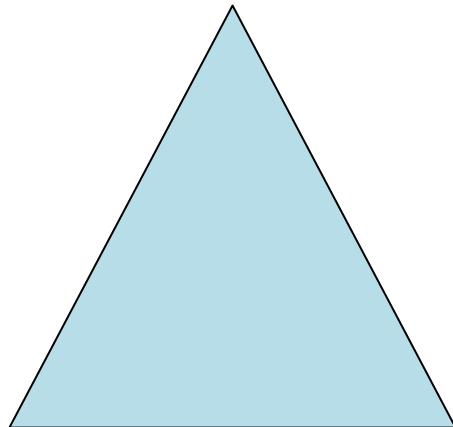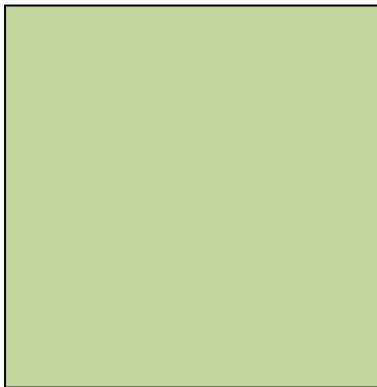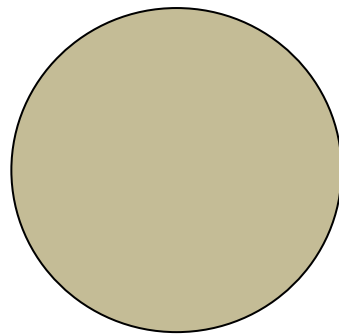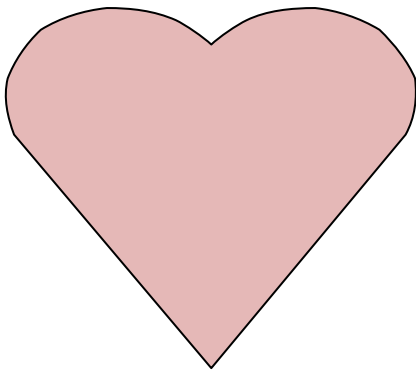
D3 QUESTIONNAIRE FOR THE TEACHER

Date..Town: ....

School ....Class: ....

Name of the child:...

1) I have taught the child for …………………… years.
2) In the Support Programme, where the children are being tutored by a volunteer from the organization People in Need, participate from my class:
…………………… children   I do not know
3) The child participates in an Education Support Programme, where he/she is being tutored by a volunteer from the organization People in Need:
yes   no   I do not know
4) The child's parents:
- Ask what is happening at school
  more times per week   ca. once a week   1-3 times per month
  less than once a month   not at all
- Ask about the child's grades
  more times per week   ca. once a week   1-3 times per month
  less than once a month   not at all
- Ask about the child's school behaviour
  more times per week   ca. once a week   1-3 times per month
  less than once a month   not at all
- Are interested whether the child attends school
  more times per week   ca. once a week   1-3 times per month
  less than once a month   not at all

5) Before joining the programme, the child's parents:
- Asked what is happening at school
  more times per week   ca. once a week   1-3 times per month
  less than once a month   not at all
- Asked about the child's grades
  more times per week   ca. once a week   1-3 times per month
  less than once a month   not at all
- Asked about the child's school behaviour
  more times per week   ca. once a week   1-3 times per month
  less than once a month   not at all
- Were interested whether the child attends school
  more times per week   ca. once a week   1-3 times per month
  less than once a month   not at all

6) The child likes to go to school:
very much   a lot   he/she does not care   not at all
7) Before joining the programme, the child liked to go to school:
very much   a lot   he/she does not care   not at all

8) Before joining the programme, the child had:

Problems with concentration	yes	no
Problems with understanding the topics	yes	no
Bad grades	yes	no
Reprehensions for improper behaviour	yes	no
Reprehensions for not fulfilling school duties	yes	no
Homework only rarely	yes	no

9) After joining the programme, the child has:

less problems with concentration	yes	no
less problems with understanding the topics	yes	no
better grades	yes	no
less reprehensions for improper behaviour	yes	no
less reprehensions for not fulfilling school duties	yes	no
homework more often	yes	no

10) Please mark, whether you agree with following statements (1=does not agree at all,…, 5=fully agree):

1 2 3 4 5

- The child does a thorough job
- The child is communicative, talkative
- The child is sometimes somewhat rude to others
- The child is original, comes up with new ideas
- The child worries a lot
- The child has a forgiving nature
- The child tends to be lazy
- The child is outgoing, sociable
- The child values artistic experiences
- The child gets nervous easily
- The child does things effectively and efficiently
- The child je is reserved
- The child is considerate and kind to others
- The child has an active imagination
- The child is relaxed, handles stress well

D4. QUESTIONNAIRE FOR THE VOLUNTEER

Name ....

Date:.. ....Town:……………………………………….

Name of the tutored child: ....

School ....Class:……………………

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1) My age: ………………………
2) Gender: male female
3) Completed education:
   primary
   secondary
   secondary vocational
   university degree

4) He / she currently (mark all the relevant answers):
   works full-time
   - Work area: …………………………………………………………………
   works part-time
   - Work area: …………………………………………………………………
   studies at a university
   - Study field: ……………………………………………………………………
   attends secondary school

5) Plans to work in social work area in the future   yes   no
   Plans to work as a teacher in the future   yes   no
   Plans to work with children in the future   yes   no

6) I work for People in Need for …………………… months (……… years).
7) I tutor the child for …………………… months.
8) Before me, the child was tutored by another volunteer:
   yes, for …………………… months   no   I do not know

9) Tutored subjects (mark all the relevant subjects):
   Czech   Mathematics   Geography   Natural History
   History   English   German   Physics
   Chemistry   Civics   other (write all): ……………………………………

10) Before being active in the Education Support Programme (mark all the relevant answers):
    I was not engaged in any other People in Need's (or other ngo's) project
    I was engaged in a project aimed at education
    I was engaged in a project where I worked with children
    I was engaged in a project where I worked with people endangered by social exclusion
    I was engaged in any other project

11) Apart from the Education Support Programme, I am also engaged in (mark all the relevant answers):
    other project aimed at education
    other project where I worked with children
    other project where I worked with people endangered by social exclusion
    any other project

12)   Before starting being active in the project:

I had experience with tutoring	yes	no
I was trained by People in Need	yes	no
I had the possibility to get to know the child's parents	yes	no
I had the possibility to get to know the child's teacher and school	yes	no

13)   I see the child for………………………hours per week.
            From that, I tutor him for …………………………hours per week.

14)   During the tutoring:

I ask the child what they did at school	yes	no
I ask the child whether he/she had problems with the topics	yes	no
I ask the child about problems with behaviour	yes	no
I ask the child about his friends and classmates	yes	no
I ask the child about extra-school activities	yes	no
I help the child with homework	yes	no
I help the child with preparation for tests	yes	no

15)   The tutoring:
        takes place every time it is arranged
        sometimes does not take place because the parents are not present
        often does not take place because the parents are not present

16)   The child lives in one household
        with both parents
        only with his/her mother
        with mother and step-father
        only with his/her father
        with father and step-mother
        with none of his parents, he/she lives with: ………………

17)   During the tutoring, ... is present:

mother	yes	no
- Is also active during the tutoring	yes	no
father	yes	no
- Is also active during the tutoring	yes	no
the child's siblings	yes	no
- Is also active during the tutoring	yes	no
other tutored children	yes	no
- number of such children: ………………		

18)   During the tutoring:

I ask parents how they help their child with preparation to school	yes	no
I give advice to parents how they should help their child prepare to school	yes	no
Parents are interested what is going on	yes	no
Parents prepare a suitable environment for the tutoring	yes	no
Parents are more interested about school than before	yes	no

19)   During the visit, I spend:
        ………………..% time with actual tutoring
        ………………..% time with answers on parents or the child
        ………………..% time with other activities

20)   The child's mother is:
      full-time employed
      part-time employed
      unemployed
      on a maternity/parental leave

21)   The child's father is:
      full-time employed
      part-time employed
      unemployed

22)   Please mark, whether you agree with following statements (1=does not agree at all, …, 5=fully agree):

                                                                        1   2   3   4   5

- The child does a thorough job
- The child is communicative, talkative
- The child is sometimes somewhat rude to others
- The child is original, comes up with new ideas
- The child worries a lot
- The child has a forgiving nature
- The child tends to be lazy
- The child is outgoing, sociable
- The child values artistic experiences
- The child gets nervous easily
- The child does things effectively and efficiently
- The child je is reserved
- The child is considerate and kind to others
- The child has an active imagination
- The child is relaxed, handles stress well

23)   During the tutoring, I experiences problems with the child's parents:
       no
       yes (please describe):……………………………………………………………………
       …………………………………………………………………………………………………
       …………………………………………………………………………………………………

24)   In total, I tutor ……………………………… children.

25)   I intend to be further engaged in the project   yes   no
       I would like to be engaged in a similar project in the future   yes   no
       I keep in touch with other volunteers from the project   yes   no

26)   My motivation to get engaged in the project was (mark all the relevant answers):
       I would like to know people from socially isolated environment
       it is a good experience for me
       I get trained for my future profession
       I find it natural to help others
       the project builds on my previous activities