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Family Background and School Achievement of Children with Motoric Disorders

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Abstract

There is no pedagogical literature about school achievement that does not include the family as a very important factor. Family and family relationships of children with motoric disorders are determined by the ability of parents and other family members to build an objective attitude toward the child with disability. That includes the construction priority in the development of the child. The main aim of this paper is to provide information about possible correlation between various family backgrounds of children with motoric disorders and their school achievement. The family background is defined by several general and specific pedagogical aspects. General aspects of the family background are related to the socio – economic status. Special pedagogical characteristics are related to parents interest in school achievements of their children, parents' help with the child learning (defined through the school curriculum), parent's involving in forcing studying habits and their support in exploring children social surrounding. Participants in this research were 75 parents all with children with motoric disorders in one school for education of children with different forms of disability. The survey used in this study was designed by the researchers. The results show that there is no correlation between economic conditions of family and school achievement of children with motoric disorders. There is a correlation between school achievement and educational status of parents, marital status of parents, parental assistance in homework, encouraging child to learn when child is coping with some difficulties at school, ensuring consistency in learning and conversation between parents and child on various topics.

Key words: Family background, Children with motoric disorders, School achievement.

Introduction

The interests of modern science in special education and rehabilitation is turning to schools more and more with the goal of determining whether the schools are living up to the expectations set before them and their work. The importance of dealing with this segment of the educational process, and therefore the bigger need for feedback as well, is derived from the complexity of the general motoric, cognitive, linguistic, social and emotional functioning of this group of students and the enormous influence it has on structuring of the activities, grouping of success and the entire teaching plan and its effect, in general.

The family – school relationship and its influence on the school achievement of the children with motoric disorders is one of the least examined problems in the area of special education and rehabilitation of persons with motoric disorders. This is, by all means, unjustified, considering that “the elementary school is the closest to the family and should perform its tasks in cooperation with the family. The school's openness towards the family and vice versa is unique in many ways and is unlike any other on any other stage of schooling. The elementary school has the interest and the obligation for establishing the initial cooperation with the family and helping to establish the family's trust toward the school and towards the education in general” (Nikolić, 1998:4). Harčev (1982) considers the family the basic component of the personality development throughout the entire life. Family, in Harčev's opinion isn't just a social microenvironment but a micro cosmos in its own right because the structure of the family is a model of the social structure. Many socio-psychological personality components are accomplished inside family circles. A child is taught not only the obligations of family life, but is also prepared for a life in the community and society. Life styles, authority of the members of the family, the size of the family as well as the social changes which greatly influence the dynamic of family relations (nowadays, a large number of divorced marriages in urban and economically developed environments, changes

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in relationship between genders and upraising styles in the family) present important factors in understanding the family environment and the children development on one side. On the other side is the family that is deeply grounded in the system of child's needs.

Divorces are more frequent for families with children with motoric disorders than for the families whose children don't have that type of problem. When the family remains whole, the father is often absent, and when he is present he rarely and inadequately communicates with his child. Children with motoric disorders lose faith in their own abilities, a sense of low self-esteem appears comparing to other students and peers, they tend to become introvert, anti-social, and tend to drift into daydreaming that compensates for their failure, negative attitudes begin to form towards the environment, the teacher and the subject as well as a misunderstanding on the relation student-school, student-parent, due to constantly experiencing failure and due to the inability to affirm themselves in socially acceptable forms of behavior, children with motoric disorders compensate for all of that with aggression, evasion, regression to primitive forms of behavior and alike (Hrnjica, 2007). Including these students in regular schools is essentially changing the school in its whole, affecting the atmosphere in the class, influencing the methodical approaches in presenting the teaching units, changing the evaluation standards. The school can significantly stabilize the feeling of security in the child when the child is successful and accepted by the teachers and peers, but a good cooperation between the family and school also plays an important role.

The forms and contents of cooperation with parents are far more diverse in elementary schools, starting from different types of mutual informing, through educating parents in pedagogical functions, up to including them in the realization of the parts of the programmed contents. Because of the importance of the cooperation between the family and the school in educating the young generations, and having their comprehensiveness in mind, the family and the school is often attributed the role of the "usual suspect" for all the mishaps and unwanted occurrences" (Nikolić, 1998:4). The subject of this research is the connection between different aspects of family environment with children with motoric disorders and their school achievements.

Method

The research method is descriptive, and the research, in its essence, provides a description of the characteristics of the family environment of the children with motoric disorders and their connection with school achievements. A surveying technique was used. For the needs of this research a *Survey for the evaluation of the pedagogical aspects of the family environment of the children with motoric disorders* was created. A large number of questions in the inquiry have the elements of the evaluation scale. The survey is comprised of several parts: a) socio-economic status of the family (four items); b) parents' interest in the school achievements of their children with motoric disorders (seven items); c) parental assistance with the child schoolwork; d) parental engagement in forming of the studying habits of the children with motoric disorders (six items); e) parental support of the children with motoric disorders with getting to know the larger environment (seven items). The survey consisted of 24 questions.

With the goal of acquiring data on the intellectual status, on the type and degree of the motoric disorder, data on the teaching program by which the student is learning, as well as the data on the school achievements, both the scholarly and the medical documentation of the students were used. The same documentation was used in acquiring the socio-economic and educational status of the family. The independent variable in this research is related to the characteristics of the family environment. It is operationalized through the following dimensions: socio-economic status of the family and specifically pedagogical characteristics (parents' interest in the school achievements of their child with motoric disorder, the parents' help with studying, parents' engagement in forming the child's studying habits and parental support in helping the child get to know the larger environment). The dependent variable in a more free sense is related to the school achievement of the child with motoric disorder, which is determined through school's documentation, as well as the type and the degree of the motoric disorder which is determined based on the available medical documentation. The data was gathered in an elementary school for the education of the children who are receiving hospital treatment "Dr Dragan Hercog" in Belgrade, Serbia. The research sample consisted of 75 parents with children with motoric disorders. The parents of children whose intellectual functioning was average and who had been, in the moment of the conducting of the research, attending classes regularly were surveyed. Besides these parameters, we made sure that the children were classified, by the act of categorization, in a group of children with motoric disorders and that they come to the classes from a family atmosphere or that they are hospitalized with one parent. Mothers were more present in the sample (44 or 58,7%) as compared to the fathers (31 - 41,3%), but without a statistically significant difference ($p = 0,784$). The children of the surveyed parents, a majority anyway (32 or

71,1%), have accomplished excellent grades in school, then very good grades (10 or 22,2%), and good grades (3 or 6,7%). There were no students who failed the class or achieved low grades.

Results and Discussion

Socio-economic Status and the School Achievement of the Students

The distribution of the surveyed participants by marital status shows that the majority of them were married (64 or 85,5%), then divorced (5 or 6,7%), as well as single parents (6 or 5,3%). The statistical analysis of the connection between the marital status and the student's school achievement shows that there is a statistically significant connection on a $p = 0,001$ level. This means that we can claim, with a 99% statistical certainty, that there is a connection between the marital status of the parents and the student's school achievement. In other words, we can say that our research has shown that students with motoric disorders show better school achievement if the parents are married, in a marital union, that is. In situations where the child grows up with both parents a high, statistically significant, difference is noted – as compared to the situations where the child grows up with a single parent – concerning the connection between the availability of internet and school achievement. An interesting fact is that in cases where a child grows up with both parents, where the family unit is complete, there is a larger amount of books in the home library than in the cases where that is not the case ($p = 0,041$).

Table 1. The connection of school achievement and specifically-pedagogical characteristics of the family

Parents' interest in their children's school achievements	p	Parent's help to children in schoolwork	p	Parents engagement in forming of the child's studying habits	p	Parental support to children with motoric disorders in getting to know the larger environment	p
Interest in homework	0,010	The subject which the children need the most help with	0,460	Persistent learning only in one and the same place	0,429	Children involvement in everyday activities	0,107
Providing assistance for completing homework	0,002	Consistency in providing the help for with studying	0,081	Who develops working habits		Taking children to various sport and cultural events	0,419
				Mother		Children participation in workshops	0,322
				Father	0,189	Do parents inform the children about the happenings	0,692
				Brother or sister	0,704		
				teachers	0,599		
				friends	0,852		
					0,105		
Which grade was the hardest for the child	0,852	Encouraging the child	0,028				
Which grade the child is now	0,105						
Are the parents cooperating with the teachers	0,669						

According to a research within the project called "Phenomenology of the disabilities and development disorders" (Golubovic and Assoc., 2005) 87,8 per cent of the children from Belgrade, of a younger school age, is living in a complete family, around 11,5 % is living with a single parent. By comparing this to the results of our research we can see the difference in the family structure, almost as much as 10% in favor of the children with typical development, according to the completeness of the family. As for the family difficulties, which influence the student success in school and school behavior, the parents and the teachers within the "Education for the society of knowledge" research (MNTP 49001, 2006 – 2010) have singled out turbulent family relations and out-of-order living circumstances as: divorce, child birth, serious illness or death of the family members,

bad quality of the child – parent relationship, socio-economic problems in the family and lower educational level of the parents.

In our research we have found a high connection between the academic status of the parents and the school achievement of the students ($p = 0,003$). This fact shows us that the students whose parents have a higher academic status show better school achievement. The importance of the differences between successes in learning, considering the degree of education in parents, Stanojlovic (1992) confirms as well in his research conducted on a sample of students and parents in Belgrade, in the municipality of Palilula. He determined that the children who are getting better results come from the families where parents have a higher educational level. The TIMSS study in 2003 conducted with standardized international instruments in Serbia on a representative sample of eighth grade students, shows that, as far as the parents academic level is concerned, the most surveyed participants come from families where parents have a secondary school degree or college degree 67%, which was also shown by our research, while there is a significantly smaller percentage where the parents have a university degree (21%). A small percentage of the surveyed students' parents have only 4 or 8 grades of elementary school finished (12%), and only 1% of the parents didn't finish even 4 grades of elementary school. The international average of parents with a faculty degree is 28%, and the among countries with the highest level of academically educated parents we have Norway 66%, USA 56%, Armenia 51% and Sweden with 48%. A correlation between school achievement and the parents' employment status wasn't found ($p = 0,920$), as well as the one between the student's school achievement and the housing status of the family. The connection between the employment status of the participants and their children school achievements wasn't statistically important ($p = 0,220$).

The Relationship between Parents' Interest and School Achievement of Children with Motoric Disorders

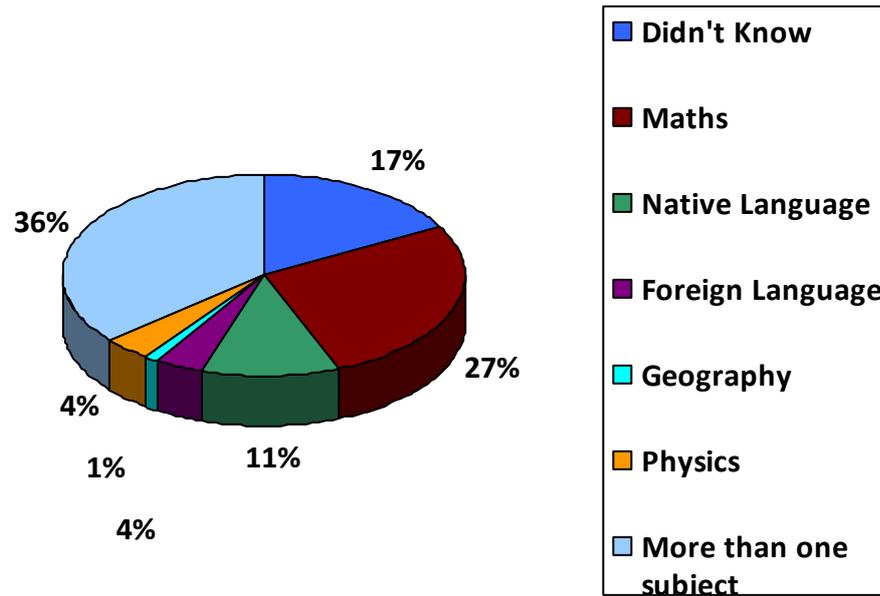
Parents' interest in providing assistance in doing homework has a statistically significant impact on the school achievement of the students ($p = 0,010$). Namely, more the parents are interested in child homework, more the child shows better school achievements. Furthermore, a very high and statistically significant connection between providing assistance in doing homework and child's school achievements was discovered ($p = 0,002$). In other words, we can say that more the parents are providing the necessary assistance to the children with their homework, better the school achievement of the children is.

A statistically significant correlation between the school achievements of the children with motoric disorders and: 1) if the parents know which of the grades was hardest for the child ($p = 0,852$); 2) if the parents know which grade their child attends ($p=0,105$); 3) if the parents cooperate with teachers ($p=0,669$); wasn't found. Studies about parents' engagement in educating their child in American state schools (Chen and Chandler 2001) point to the fact that the children whose parents were actively engaged and cooperative with the school, have a better chance to accomplish higher educational achievements, are more frequent in attending classes and have a higher level of aspirations, better attention and are more frequent at doing their homework assignments.

Parents' Assistance to Children with Studying

Studying the connection between the subjects which require the most help in doing homework and school achievements of the students we didn't discover a statistically significant connection between these two variables ($p=0,460$). Nevertheless, important information is that it is Mathematics, an isolated subject, that the largest number of our sample's surveyed participants 21 or 27% is providing their children help with (see Graph 1).

The largest number of surveyed participants of the sample is just guiding their child while doing homework (41,3%), checking the already done homework (34,7%) or explaining what is unclear in schoolwork (28%). 22 participants (or 29,3%) do not provide any sort of assistance with homework, which is in discrepancy with the answers on the question about the subjects which the children require help with. We notice that there is a large number of parents who notice that their child needs help with homework (64 or 85,3%), but that only 53 (or 70,6%) of our surveyed participants are actually providing assistance. The reasons for this discrepancy will be the subject of future research. The distribution of the participants according to whether they encourage their child when it is having a hard time with schoolwork shows us that 60 of the surveyed participants (or 80%) always encourage their child when it is having troubles. The research has shown that the more the parents encourage their child the more achievement in schoolwork the child has ($p=0,28$).



Graph 1. Which subject does your child need the most help with

The largest number of the surveyed participants is providing their children with constant help in studying (30 or 41%), while the same number provides usually constant help and irregular help with studying (each 14 or 18,7%). The constancy in providing help to their children with studying doesn't significantly influence the school achievement of the students ($p=0,081$).

There is no statistically significant connection between the accomplished school achievements and the type of help provided, as follow: explaining what was unclear in schoolwork ($p=0,518$); I read the lesson to him/her and then we go through it together again ($p=0,234$); I check what he/she has learnt after studying alone ($p=0,178$); I don't help my child with studying ($p=0,720$); other help with studying ($p=0,441$).

There is no statistically significant connection between the source of the help provided to children in studying and the accomplished school achievement: 1) between the mother who helps her child the most and its school achievement ($p=0,185$); a teacher as the one who provides help and school achievement ($p=0,570$); the father as the one who provides help and school achievement ($p=0,454$); a sibling as the one who provides assistance and school achievement ($p=0,665$).

Parents' Engagement in the Forming of Working and Studying Habits in the Children with Motoric Disorders

While evaluating the parents' engagement in forming the studying habits of children with motoric disorders we examined whether the parents insist that the child always studies in the same place; who develops studying habits in children; which working habits are considered important; as well as ways of developing working habits. The majority of the surveyed participants (29 or 38,7%) always insist that their child studies in the same spot, 17 of them (22,7%) usually insists this, and 14 (or 18,7%) never insists, while 6 (or 8%) of the surveyed participants usually doesn't insist that their child studies in the same place. Seven or 9,3% wasn't sure whether they should do that. The working habits are developed by the mother in the opinion of 58 surveyed participants (77,3%), then the teacher (13 or 17,3%) and then the fathers (11 or 14,9%), the siblings (10 or 13,3%), and friends (6 participants or 8%) were identified as the people who help the students with motoric disorder form working and studying habits in a smaller degree.

The distribution of the surveyed participants according to the habits they deem important shows that 68% of the surveyed participants consider that all studying habits are important. Relearning the lessons is important to 33,3% of the surveyed participants, and doing homework regularly is a habit 32% surveyed participants considered important. Practicing parts of the school material is a studying habit which 15 of the surveyed participants (or 20% of the sample) considered important.

The distribution of the surveyed participants according to the way the working habits are developed in their child showed that the most of the participants do this by consistency to a schedule (37 or 49,3%), then by reward (22 or 29,3%), while 6 of the participant or 8% use punishment or other methods to develop these habits. 11 participants or 14,7% don't develop the studying habits of their children. Connecting the school achievement of the students and consistency to a schedule a statistically significant connection between these two variables was established ($p=0,030$). A correlation between school achievement of the students with motoric disorders and the rest of the variables which were used to follow the parents' engagement in forming the habits wasn't found ($p>0,005$).

Parental Support to the Children with Motoric Disorders in Getting to Know the Larger Environment

The largest number of the surveyed participants of our sample (40 or 53,3%) completely agreed with the claim that they should inform their child about what happens in their surroundings, while 30,7% of the parents mostly agreed. The smallest number of the participants (1 or 1,3%) does not inform their child about what happens in their surroundings. Twenty two or 29,3% of the participants regularly includes their child in everyday activities, while 21 or 28% usually does this. In these activities, 12 participants or 16% doesn't include their children in these activities and 10,7% is not entirely sure whether to do it or not. Twenty four participants or 32% of our sample usually visit sport and cultural events with their children, while 21,3% usually doesn't do so. A large part of the negative distribution is noticed here, comparing to the previous results, which can be interpreted thought problems in transport and architectural barriers which prevent the access of the persons with motoric disorders.

Analyzing the responses of the surveyed participants of our sample we notice a dominance of answers in which the activity of involving the children with motoric disorders in workshops outside the school premises is negated (45,3% of the parents never involve their children in this activity, while 17,3% mostly don't do this which makes 62,6% of the total sample). The activity which is the most dominant in their free time is walking or recreation (46 or 61,3%), followed by discussion on various topics (33 or 44%) and watching television (30 or 40%). Fifteen participants or 20% read in their free time or go to sport or cultural events (14, or 18,7%).

Forty eight per cent of the participants try to bring closer events which are unavailable to the child, while 28% usually does this. Ten participants (13,3%) are undecided, while only 6,7% of the participants never do this. The answers to this question speak in favor of the fact that the parents are investing an effort and that they are aware of the importance of involving their child in everyday life, even to the events which are inaccessible to the child. The distribution of the surveyed participants according to the way they are trying to involve the child in the events which are unavailable for him/her shows that the parents for the most part, do this by reading magazines and newspaper together (34,7%), watching movies (32%), by using internet (21,3%), while around 4% of the parents aren't trying to involve their child at all.

Analyzing the connection between school achievement and the variable concerning the way the parents are trying to bring a child closer to an activity which is unavailable for him/her, we have found a statistically significant connection ($p=0,039$) between school achievement and discussions about different topics, which means that the results were better with those students whose parents used this way of involving the child in the events which are unavailable for him/her. There is no correlation between school achievement of the students with motoric disorders and other variables which were used to follow the parental support to children in getting to know the larger environment.

Conclusion

The family engagement, in certain measured variables, has the role of helping children with motoric disorders with school achievements, but we notice that a different factor is prevailing in creating the school achievement of these children. The fact that the received results in the area of specific aspects of the family environment do not correlate with available results of similar researches conducted on the children of the typical population speaks in favor of this, although a variation of the results and an existence of a statistical connection between specific pedagogical aspects of the family environment and school achievement of the children is noticed in these researches. We can find the reasons for these results in the following: 1) the research was dealing with examining the connection between school achievements of the students with motoric disorders and specific aspects of family background, that is, with variables which are difficult to control, because the results are based on responses of the parents, and, therefore, subjective and not objective; 2) the students included in the research

have a school achievement in the diapason of 2 grades (from 3 – good to 5 – excellent) which can be characterized as a very good average achievement, and because of this, the possibility of getting a difference in measurable variables and checking the significance of the correlation of the variables ensued and school achievement was greatly decreased; 3) apart from this, the researches which have been dealing with school achievement of the students with motoric disorders (Ilic-Stosovic, 2005) point out that a numerical grade isn't an objective indicator of the school achievements of the student, because in the forming of such numerous other factors are presents, so it is possible that a high average such as this one has no objective value. This research has once again confirmed that the population of the children with motoric disorders, because of their specific family, personal and general functioning, requires a special methodological and researching approach.

Recommendations

Future research in this field should concentrate on examining to what degree do motoric disorders (type and degree), beside parents' engagement, influence the appearance of failure in school, and school achievement should be checked by standardized tests of knowledge. Also, teachers should be introduced as a control group which would state their attitude about the parents' engagement. Furthermore, it would be interesting to examine the influence of the family background and environment on the appearance of the failure in school of the students with motoric disorders by comparing the group of children who come to school from a family environment with the ones who are in hospitals without any parents present.

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