FOLIA 86

Annales Universitatis Paedagogicae Cracoviensis

Studia ad Didacticam Biologiae Pertinentia I (2011)

Ilona Żeber-Dzikowska The role of the family in shaping attitudes in favour of nature

The continuation of the above mentioned subject matter results from earlier investigations and the monograph "The Significance of Biology Teaching in the Process of Shaping Students' Personalities" reviewed by professor Wiesław Stawiński. At this point, I would like to thank him not only for precious remarks and content-related suggestions but also for the philosophy of the perception of people together with the broadly understood aspects of their psychical nature.

In relation to this, I began to carry out investigations and to work on the issues connected with the basic concepts associated with the role of the family in the educational process. To be precise, such concepts dealt with the role of the family in order to shape attitudes in favour of nature, which were strictly connected with the terminology and family nomenclature as the fundamental social group, its functions in the child's personality formation, his/her place in the social group, positive and negative parents' attitudes as well as development of children's and young people's interests at different educational levels.

For all of us, the family is an elementary unit of social life, the so-called foundation needed to prepare for the future. It shapes the basic features of character and/ or personality as well as initiates social life. The family is our first educational environment and the 'picture of the world'. Thanks to the family, we feel safe, learn about interestedness, commitment, respect, love and sensibility. The family brings children up and educates them by the sheer fact that children are its members. Proper norms, examples of behaviour, moreover, human's personality are created due to it. Furthermore, the family should be an instance of authority. Such definitions could be considered taking into account many aspects. Moreover, each of them links to a particular aspect of the family function: the educational role, so as to shape the features of character and/or personality as well as to introduce a child to social life, furthermore, the fulfilment role, i.e. meeting children's basic needs.

Consequently, parenthood is a crucial duty, therefore, a matter of honour. For that reason, an adequate fulfilment of parents' roles creates the basis for the existence of a correctly and efficiently functioning country. The appropriate values inherited from the family should introduce children to social life, make it easy for them to function and live together in a community, but should also enable their intellectual and physical development. In this context, the aim of the investigation is to show the role of the family in creating and developing young people's attitudes that are in favour of the natural environment.

In order to show the role of the family in shaping young people's attitudes that are in favour of the natural environment in the light of the BSc thesis written by Magdalena Dzierżak (supervised and initiated by dr llona Żeber-Dzikowska representing the Division of Biology Didactics and Environment Protection (Dzierżak, 2008, p. 75)), a research study on parents was conducted. The parents represented the group of pupils and students from primary, lower secondary (later referred to as gymnasiums) and upper secondary schools. Among them, there were people from villages and cities that graduated from primary schools, high schools and universities. Consequently, 300 respondents were included in the investigation. The questionnaire, used to conduct the investigation, was submitted in February 2008. The following schools were included in the investigation: "Bohaterów Walk Partyzanckich Schools" in Chotcza in Mazowieckie Province, A. Dygasiński Primary School No° 9 in Kielce, Tadeusz Korczak Gymnasium No° 3 and Piotr Ściegienny Upper Secondary School No^o 5 in Kielce. For that reason, the method of a diagnostic survey was used with the questionnaire as a tool to analyze the role of the family in shaping attitudes towards nature. A questionnaire is "irreplaceable in pedagogical investigations as a tool of learning about characteristics of population, facts, opinions about events, moreover, it helps collect numerical data. However, it is more difficult to observe with the questionnaire more complex problems of the educational environment. It cannot be fully used to recognize the arrangements and the social dependences, the course and conditioning of the social processes in the environment" (Pilch T. & Bauman T. 2001, p. 97).

The key problem, detailed issues, as well as the investigative hypotheses were formulated.-

The key problem was specified as follows: "What role does the family play in shaping the child's attitudes in favour of nature?"

The key problem:

- Do mainly parents shape the correct attitudes of their children and in what way?
- Does looking after animals and plants influence the natural sensitivity of children?
- What sources of information dealing with nature are the most influential in developing and enriching children's knowledge in this sphere?
- Does spending free time in parks and nature reserves influence the process of shaping the attitudes in favour of nature and in what way?

The main hypothesis: "Family, to a very large extent, influences appropriate child's attitudes in favour of nature with regard to its principal and educational functions."

Detailed hypotheses:

• Parents most frequently shape their children's appropriate attitudes in favour of nature by introducing proper principles connected with the environment protection as well as by taking part in events, school trips or by spending free time together;

- Looking after animals and plants, to a very large extent, influences the process of developing a natural sensitivity of children;
- Children's scientific knowledge of nature can be enriched by presenting interesting TV programmes, books and magazines connected with the natural sciences;
- Spending free time in parks and nature reserves influences the process of shaping the attitudes in favour of nature.

The analysis of the investigated data

The investigations were conducted with the use of questionnaires which were created on the basis of the earlier mentioned problems, i.e. main and detailed ones, that is, how family shapes the child's attitudes in favour of nature. The questionnaires were introduced to the group of three hundred parents chosen at random (n = 300). They were parents of pupils and students at three educational levels: primary school, gymnasium and upper secondary school. The questionnaire involved 20 questions, 16 of them referring to the investigated questions and 4 to the respondents background. The analysis of the answers given in response to the questionnaire questions demonstrates some kind of an overall image of how parents influence the development of their children's attitudes in favour of nature. Moreover, the analysis shows what kind of activities the parents engaged in or organized (by sex, education, school location (which their children attend), i.e. village / city, as well as by the educational level of the children.)

RESPO	INDENTS	n	%
- Cov	Woman	232	77
Sex	Man	68	23
School	City		55
SCHOOL	Village	134	45
	Primary School	110	37
Educational level	Gymnasium	118	39
	Upper secondary	72	24
	Primary	26	9
Education	Secondary	178	59
	Higher	96	32

Tab. 1. Data about the respondents

The analysis of the results confirms that that 232 women, i.e. 77 % as well as 68 men, namely, the equivalent of 23% took part in the investigation. The differentiation of the group regarding the school location appeared in the following way: 166 parents (55%) sent their children to school in a city, but 134 (45%) sent their children to school in the country (rural schools). Considering the level of education, 110 parents (37%) represented primary school pupils, 118 (39%) gymnasium students and 72 (24%) upper secondary students of all kinds. Reflecting on the educational level, one notices that 178, i.e. 59% of parents represented secondary education (general qualifications), then 96 (32%) of the respondents completed higher education

and 26 respondents, that is, 9% of the group had primary school qualifications. Figure 1 shows the comparison of sexes and types of respondents' education.

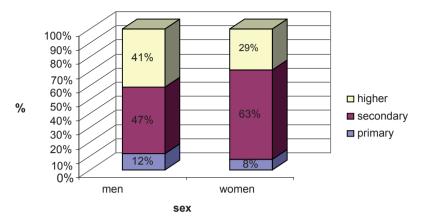


Fig. 1. Sex and the education of the respondents

The group of the male respondents who completed secondary education was equal to 32, (47%), while the group of men with higher education amounted to 41% (28 men). Only 8 men, that is 12 %, completed primary school only. The women's educational background in general was similar to that of men, apart from a significant difference in the sphere of secondary and higher education. That means that 63% of women (namely 146) completed secondary education, while 29% (68) completed higher education.

The analysis also concerned relations between the respondents' levels of education and their children's school locations.

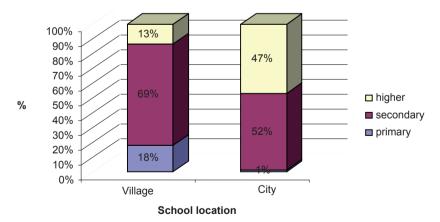


Fig. 2. School location of pupils & students and their parents' education

Almost all parents, i.e. 52% of pupils and students from the municipal schools, completed secondary education and 47% completed higher education. Only 1% of parents completed primary school only. Considering the countryside, the results look slightly different. The majority is represented by 69% of parents with

[164]

secondary education, 18% with primary school education and only 13% with higher education.

The respondents were asked about their interpretation of the term "parental attitude". According to them, such an attitude is expressed in every word, every gesture, every activity connected with taking care of children. It is the reflection of the emotional relation between a child and a parent. The parental attitude has to be firm and consistent, clearly presenting appropriate norms of conduct and aims of life. Parents try to develop their children's proper behaviour with regard to all living creatures. They see to shaping their children's appropriate attitude towards the reality of the surrounding world and making them use goods reasonably. Moreover, parents identify and satisfy their children's needs and have a considerable influence on creating their personalities. According to the respondents, the presented definition can include such contents as respect for the child, initiating the feeling of the child's own significance and dignity, sincerity, firmness and consistency which should become the determinants of an appropriate parental attitude.

Descibility of choice	Primary School		Gymnasium		Upper secondary	
Possibility of choice	n	%	n	%	n	%
Developing interests	86	78%	96	81%	60	83%
Shaping attitudes in favour of nature	76	69%	98	83%	46	64%
Developing school knowledge	86	78%	102	86%	48	67%
No influence	2	2%	2	2%	0	0%

Tab. 2. The influence of school trips and field activities on particular spheres of students' education levels

*% there is no 100% effect – multiple choice questions

For the parents of children attending primary school, trips and field activities have the greatest influence on developing children's interests and school knowledge. The results show that such answers were given by 86 parents, that is 78% in each case. However, the parents of children from gymnasium claimed that such activities were most beneficial to develop school knowledge: declared by 102 people, that is 86%. The results for upper secondary schools were different. Parents believed that trips and field activities influenced, first of all, the development of interests, i.e. 60 respondents (83%) gave such an answer. The above mentioned results of the analysis clearly show that the majority of the respondents agreed that such forms of activities are beneficial for the development of their children. To a very large extent, they influence the process of creating different kinds of interests, they stimulate children to act, and moreover, they stimulate children's natural curiosity, and, first of all, shape the appropriate habits. The respondents were also asked how they spent their free time with their children. After the analysis of the questionnaires, several actions were noted. They provided most answers. In their free time, the respondents mainly took their children for long walks as well as organized bicycle trips, went to the cinema, went to the plot properties, or organized different kinds of games improving the children's skills in the open air. However, there were parents who in their free time read books with their children, did homework together with the children, played different kinds of games or just talked.

Possibility of choice	n	%
Touristic values of nature at the seaside	150	50%
Touristic values of nature in the mountains	124	41%
Attractive trips abroad	32	11%
Landscape parks and nature reserves	70	23%
Various forms of nature protection	44	15%
Other	36	12%

Tab. 3. Factors influencing the choice of place for rest during the holidays

*% there is no 100% effect - multiple choice questions

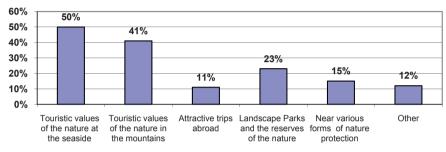


Fig. 3. Factors that mainly influence the choice of place for rest during the holidays

Then, the respondents were asked about motivation in choosing the place for the holiday. 150 parents (50%) highlighted the touristic and natural values of the seaside. The second place referred to the touristic and natural values of the mountains, that is, 124 parents (41%). Landscape parks and nature reserves were less popular and were indicated by 70 parents i.e. 23%. Trips abroad, however, appeared to be the least popular, because only 32 respondents (11%) underlined such an answer. In conclusion, it can be affirmed that parents seldom chose trips abroad because they were connected with high costs – they were simply expensive. The group of 36 parents, i.e. 12%, indicated another answer in order to select the place of relaxation. They claimed that the most significant reason was the desire to meet interesting people and see interesting places, monuments of architecture, etc. Some parents selected family houses in the country as a place for holidays. The trip costs and the accessibility of the offer were the most frequently appearing answers connected with holidays.

Dessibility of choice	WO	men	men		
Possibility of choice	n	%	n	%	
Touristic values of nature at the seaside	122	53%	28	41%	
Touristic values of nature in the mountains	102	44%	22	32%	
Attractive trips abroad	22	9%	10	15%	
Landscape parks and nature reserves	52	22%	18	26%	
Various forms of nature protection	36	16%	8	12%	
Other	28	12%	8	12%	

Tab. 4. The degree of the influence of the choice of place for holidays according to sex

*% there is no 100% effect - multiple choice questions

[166]

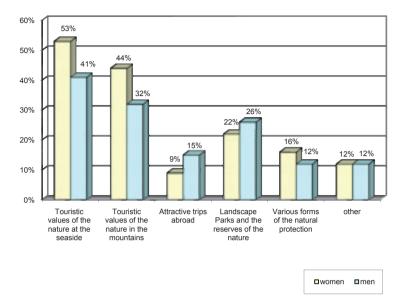


Fig. 4. The degree of the influence of the choice of place for holidays according to sex

The above presented results show that touristic values associated with the nature of the seaside and the mountains (102 - 42%) are generally preferred by women and less frequently by men. The men sample shows 28 respondents (41%) in favour of the seaside and 22 (32%) in favour of the mountains. Nevertheless, relaxation near landscape parks and nature reserves were indicated by 18 men (26%), moreover, they also preferred attractive trips abroad in the number of 10 respondents (15%).

Tab. 5. Dependences between shaping the children's attitudes in favour	of nature and their school
--	----------------------------

Possibility of choice	Ci	ty	Village		
	n	%	n	%	
Active participation in "Clean up the World"	48	29%	74	55%	
Behaviour during the visit to a landscape park	92	55%	60	49%	
Building together a feeder	42	25%	40	30%	
Taking care of plants in the private garden	120	72%	110	82%	
Other	18	11%	12	9%	

*% there is no 100% effect - multiple choice questions

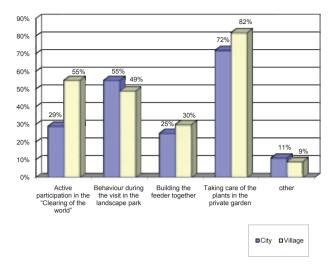


Fig. 5. Dependences between shaping the children's attitudes in favour of the nature and their school

The parents were asked in what way they developed their children's attitudes in favour of nature. Therefore, the place of residence created the criteria in this test. It appeared that 74 parents (55%) from the countryside declared active participation in "Clean up the World" event. Hoverer, in the city, only 48 parents (29%) indicated their participation in this event. Probably the results are connected with the fact that mainly farmers live in villages (in the countryside) and due to their unlimited time of work they can afford to look after children, to participate in such events and to support the children during such activities. Furthermore, taking care of the plants in a private garden was indicated more frequently in case of respondents from the country (specified by 110 respondents (82%)). However, in the city, 120 people (72%) chose that answer. The different results are obviously to the place of residence. The parents in the countryside have better conditions to spend time in the garden with children and to teach them how to take care of plants. Consequently, the respondents from the city more often pay attention to the children's behaviour during the visit to a landscape park, i.e. 92 (55%), however, parents from the countryside represent only 60 (49%) cases in such circumstances.

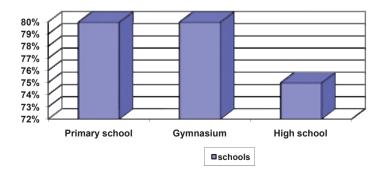


Fig. 6. Interests in nature programmes watched

In primary schools and gymnasiums, 80% of parents claimed that they watched TV programmes dealing with nature together with their children, in upper secondary schools, however, it happened in 75% of cases. The outcomes of the investigation are very high, and the difference between them could result from the fact that students from upper secondary schools made their own choices considering their favourite TV programmes. The reason for this could be their age, which allows them to select their own interests. Not without significance is the fact that their interests are not usually the same as those of their parents. While being young, it is important for the parents to accompany their children in getting to know the world of TV so as not to leave them alone in front of such a powerful medium. It is essential to make them realize that what they can see on TV does not represent the reality but fiction. The respondents who did not watch TV nature programmes with their children provided lack of time as explanation. Respondents most often accompany their children in watching such programmes as: "National Geographic", "Discovery", "Animal Planet", as well as the broadcasts "Mysteries of the Polish Nature", "Nature Rescue", "The Life of Animals", The Earth", "Year in the Garden", "The Animals of the World", "Barefoot across the World", "A Camera among the Animals."

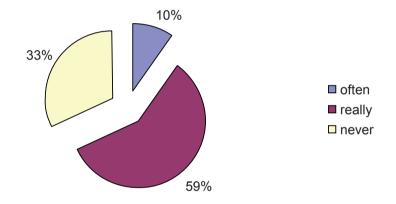


Fig. 7. The frequency of parents' buying nature books or magazines

Only 10% of the respondents acknowledged that they often bought nature books or magazines for their children. The majority, i.e. 59% of people seldom bought such literature. Furthermore, 33% of the respondents did not buy their children books connected with nature, plant and animal worlds. It probably results from families' poor financial situation or parents' lack of awareness associated with cultivating the appropriate attitudes in favour of nature or environment protection. Despite the fact that in total 92% of the respondents often or seldom bought literature about nature, the parents were rarely able to give several examples, such as: "The Encyclopedia of Nature", "The World of Animals", "The Nature of Poland", "Mysteries of the Polish Nature", "National Geographic", "Mammals of Europe", "Animals".

Parents' education	Prin	nary	Secondary		Higher	
Places	n	%	n	%	n	%
Botanical Gradens	8	31%	36	20%	44	46%
Zoological Garden	12	46%	112	63%	80	83%
Aquarium	2	8%	24	13%	36	38%
Animals' show	10	38%	64	36%	44	46%
Plants' exposition	4	15%	50	28%	30	31%

Tab. 6. Places to which parents take their children

*% there is no 100% effect - multiple choice questions

The parents with higher education most frequently took their children to botanical gardens – 44 people (46%), zoological gardens (80 – 83%), aquarium (36 - 38%), animals' shows (44 – 46%) or plants' expositions (30 – 31%). It can result from the fact that people with higher education paid more attention to their children's education in every field of life. Very often they also shared the same interests and life passions with their children. The parents with the secondary education most often took their children to zoological gardens, as reflected in 112 cases (63%). However, persons that completed only primary schools preferred zoological gardens, i.e. 12 people (46%) and animals' shows, 10 respondents (38%).

Table description	Eating fast food	Incorrect order	Fast eating habits	Irregular eating habits	Stress	Eating habits at night	Cold & hot meals	Lack of food variety
8	142	20	2	6	40	32	16	42
7	52	34	26	34	42	68	34	12
6	20	30	46	32	44	64	30	32
5	14	30	66	48	48	38	28	28
4	14	34	50	74	46	14	30	38
3	8	64	48	38	48	36	34	24
2	8	34	50	42	20	40	70	36
1	42	54	12	26	12	8	58	88

Tab. 7. Factors influencing incorrect nutrition

The respondents were asked later which of the mentioned factors had the greatest influence on children's bad eating habits. The answers to this question varied. The parents most often indicated that a regular eating of fast food was most harmful for children (142 people). Nowadays, people are frequently on the go. Therefore, parents are afraid of proven harmfulness of fast food and try to limit its consumption. As the less significant influence, according to the respondents, was the lack of food variety (88 people). The remaining rates appeared in comparable proportions. This could result from the fact that every parent has an individual approach towards the eating habits of the family. Parents take care of their children's health and, therefore, cultivate habits connected with healthy nutrition. They try to protect their children from an excessive consumption of fats, and enrich their meals with larger quantities of vegetables, fruit and dairy produce. It is also important for them to eat meals at fixed times as well as to east varied meals. Many respondents stressed the importance of the quality of eaten meals. They very often paid attention to the bad habit of drinking sweetened and unhealthy drinks which contained large amounts of chemical substances. The last idea that the respondents emphasized most frequently was eating light suppers at about 6 pm. It can be affirmed that parents tried to ensure that their children lead a healthy lifestyle and they took care of their everyday meals and appropriate diet supplements.

Dessibility of choice	Ci	ty	Village		
Possibility of choice	n	%	n	%	
Feeding	162	98%	126	94%	
Building shelters and feeders	42	25%	70	52%	
Supporting charity organizations	24	14%	6	4%	
Working for animals kennels/shelters	2	1%	0	0%	
Other	4	2%	14	10%	

Tab. 8. Activities in favour of animals

In both city, i.e. 162 (98%) and village, i.e. 126 (94%), the respondents indicated that their children most often helped animals in difficult situations by feeding them. These values in this range are the highest. It can result from the fact that the lack of food was the main reason for homeless animals' deaths. Children often left them leftovers after meals, fed them during the winter and helped them to survive this period of time. It is important, however, for the animals to be fed regularly. The construction of shelters and feeders was quite frequent in villages (70 – 52%) and much more seldom in cities (42 - 25%). In villages, the accessibility of the building material in order to create various animal shelters as well as large space and closeness to nature could influence such results. In the city 24 people (14%) indicated that they support charity organizations and this factor is available in bigger agglomerations. In villages (10%) specified that children supported animals in a different way, e.g. they very often took homeless dogs and cats home, as well as they tried to find a safe place for them.

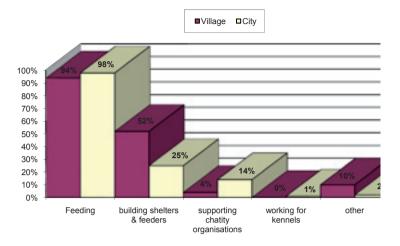


Fig. 8. Activities in favour of animals

Place of residence	Cit	у	Vill	age
Activities in favour of environment protection	n	%	n	%
Segregation of waste	102	61%	82	61%
Knowledge of recycling	148	89%	104	78%
Going shopping you	take:			
Linen bag	84	51%	70	52%
Wicker basket	56	34%	14	10%
Disposable bag	94	57%	74	55%
The need for larger number of rubbish bins	152	92%	116	87%
Giving back to purchase the secondary materials	58	35%	60	45%
Buying products you lo	ook at:			
Best-before date	156	94%	132	99%
Price	134	81%	106	79%
Food energy	80	48%	44	33%
Ecological symbols on the packaging	80	48%	46	34%
Preservatives added	106	64%	58	43%
Limited use of water	130	78%	90	67%
Limited use of energy	138	83%	108	81%

The next question inquired into the matters relating to the environment protection according to the respondents' places of residence. It turned out that in both villages (82–61%) and cities (102–61%) many families segregated waste. However, the knowledge of recycling was better in cities 148 (89%) than in villages 104 (78%). 84 respondents (51%) in the city took a linen bag with them when going shopping. Nevertheless, it happened to 70 respondents (52%) in villages. However, a disposable bag was taken by 74 respondents (55%) in cities and 94 (57%) in villages. Moreover, 152 respondents from cities (92%) and only 116 people from the villages (87%) could see the need for a larger number of the waste containers. However, the idea of collecting recyclable materials was not as popular in villages (60–45%) as in the city (58–35%).The majority of parents while buying different kinds of products paid attention to their usefulness, that is 156 (94%) in the city and 132 (99%) in villages. Both food energy (caloricity) and organic values appeared in similar numbers, namely, in the city 80 (48%) and in villages 44 (33%) respondents paid attention to food preservatives while shopping. However, if we considered the amount of water and energy use, then 130 people (78%) from the city and 138 people (83%) from villages thought about it.

The ways in which parents shaped their children's attitudes in favour of nature protection concerned, first of all, the process of teaching. For instance, parents taught children not to use a large quantity of detergents in the house, not to litter in nature reserves and similar places as well as not to collect and destroy protected species of plants. Together with their children, they participated in the process of work in the garden, and took care of the tidiness of their own surroundings. They often bought nature books and explained how to respect nature and how to behave in natural surroundings.

Dessibility of choice	Woi	man	Man		
Possibility of choice	n	%	n	%	
Often	82	35%	18	26%	
Really	116	50%	42	62%	
Never	34	15%	8	12%	

Tab. 10. Interest in plants in parks and nature reserves

The respondents were asked whether they paid attention to tree and animal species while walking with their children in a park or forest. The respondents were divided according to their sex. It can be stated that women more often drew children's attention to different elements of nature. The results showed that 82 women (35%) and 18 men (26%) did it. The majority of the respondents rarely paid attention to tree and animal species, namely 116 women (50%) and 42 men (62%). 34 female respondents (15%) and 8 men (12%) did not mention this subject. This could result from the fact that parents taught their children about trees and animals that were popular. After analyzing the questionnaires one can notice that parents with higher education, who might have greater knowledge on this subject, often drew children's attention to the elements of nature, they shared their knowledge on this subject more often than people who completed only primary and upper secondary schools.

While spending time with their children in parks or nature reserves, the majority of parents taught their children not to litter, to dispose of litter in special places, to remain silent and to behave in a calm way so as not to frighten animals away. A large group of parents in their statements highlighted that they paid special attention to the explanation why children should behave according to the park or the reserve regulations and how important it was to follow the specified paths. The respondents thought that the observation of nature and the phenomena that took place there was very important.

Rules of the healthy lifestyle	YES		NO		RARELY	
	n	%	n	%	n	%
Washing hands before every meal	254	85%	14	5%	32	11%
Maintaining dental hygiene	286	95%	6	2%	8	3%
Taking care of hair and skin to keep it clean	278	93%	12	4%	10	3%
Taking care of body hygiene	280	93%	12	4%	8	3%
Supporting corrective exercises	106	35%	88	29%	106	35%
Games developing skills in the open air	186	62%	46	15%	68	23%

Tab. 11. Healthy lifestyle of the child

254 respondents (85%) paid attention to the routine of washing hands before the meals. In 286 cases (95%) parents reminded and instructed their children to take care of their dental hygiene. Similar results were recorded with regard to personal hygiene (280 – 93%) as well as taking care of skin and hair (278 – 93%). The remaining results did not reach such a high level. It could be stated that the majority of the parents took care of their children's healthy, clean and neat appearance. They paid attention to how their children should behave before and after meals. They taught their children to take care of the body hygiene.

Discussion of results

The aim of the investigation was to show the role of parents in shaping attitudes in favour of nature.

One of the hypotheses stated that parents most often shape their children's appropriate attitudes in favour of nature by providing proper principles connected with the environment protection as well as by participating in events and school trips, moreover, by spending their free time together. The analysis of the question-naires confirmed this hypothesis as 138 parents (83%) from the city declared that they saved energy in their houses. Furthermore, 81% of parents (108) referred to the process of saving light energy in villages. Waste segregation is carried out by 102 parents (61%) in the households of families living in the city, and by 82 people in villages, which likewise amounts to 61% of the results. Therefore, the scores could be considered as very high. Only 29% of the parents from the city, that is 48 people, participated in the event called "Clean up the World" and 77 people, i.e. 55% of respondents from villages took part in it. The analysis of results confirms that the

hypothesis was also proven with regard to parents' spending their free time together with their children at different age stages. It was confirmed by the following statements:

"I most often spend my free time with my child reading books together, walking or working in the garden outside";

"We prefer to spend our free moments visiting the garden or going to the cinema" "In our free time we often play different kinds of games that develop skills in the open air and we also do children's homework together"

While analyzing parents' statements with regard to leisure , we should draw attention to the necessity of considering the role of parents' financial situation. Not every one could afford going to the cinema with their children, therefore the answers including visits to the garden or reading books together appeared quite often.

In the present literature relating to the discussed problem, the results of L. Domki (2004) were found. However, they only partly agree with the hypothesis, e.g. in relation to the statements of the children from rural areas considering the environment protection ("in their houses, they saved the energy by turning off the light"). It was confirmed by 84% of the respondents. Nevertheless, in 60% of the houses waste segregation did not take place at all, in 36% it appeared only to some extent, moreover, 4% of the families separated waste according to its future use. However, the investigations conducted by H. Cudak (1995) showed that only 1.5 of parents (28 people) often participated in school ceremonies, moreover, 53%, that is 954 parents never participated in these kinds of events. The author explains that such outcomes result from "the lack of knowledge, skills, low intellectual level, lack of time as well as the appropriate teacher-tutor guidance" (Cudak 1995, p. 198).

Analyzing the frequency of parents' spending their free time together with their children, H. Cudak (1995, p. 165) showed that "the parents of students with high grades are closer to their children - 56% of the parents under consideration coming from large cities, 54% from small cities and 35% of parents from villages often and very often spent their free time together with their children" (Domka 2004, p. 57). In the present literature connected with the forms of spending free time with children, it is difficult to find authors investigating this subject, although in the psychological and pedagogical works there are indications that parents who take care about the correct psychical and physical development of their children spend a lot of time with them. Therefore, they can both concentrate on their needs and support their intellectual development. The reality, however, is different from the book definitions as we can hear and it can also be observed that parents are very often too busy working to spend a lot of free time with their children. They take care of the financial side and of create appropriate life conditions. The parents also tend to be so overworked that they forget that parent-child communication and the co-operation skills are more essential than satisfying the financial needs.

The second hypothesis involves the fact that taking care of animals and plants significantly influences the development of children's natural sensitivity. On the basis of the results analysis, we can confirm this hypothesis as both in the city (98%) and in villages (94%) the respondents confirmed that their children fed animals. The parents equally often declared that their children helped in the garden outside,

that is, 72% of the respondents from the city and 82% from villages. Such results can also be found in the literature. Domka (2001) writes that "farming of plants and animals has a beneficial influence on the emotional and cognitive development of the young generation. They generate interests in the world of the living creatures, their life conditions, the way of reacting in order to consider environment factors. Farming makes children more sensitive towards the need of organisms, teaches the regularity in the process of taking care, taking responsibility for their health and their lives" (Domka 2001, p. 109).

Despite the beneficial influence of the process of taking care of animals and plants on the children, the author's investigations show varied results. It is confirmed by the data which states that families from villages, i.e. "78% of the children have animals in their houses and farms, which they can name. Only 40% have some animal to look after, among which 8% must feed them and 36% must take care of their shelters, moreover, 12% must play with them and spend time walking. Only 4% of the respondents knew the complete life requirements of their animals. 28% showed interest in birds. However, 56% did not like some coexisting with humans and animal species. They sometimes expressed the emotions full of disgust. The detested animals made the children treat them reluctantly and aggressively. The respondents generally declared that in case of animal diseases they would ask a vet for help or could also refer to an older person. The respondents believed that animals should always serve the human" (Domka 2004, p. 57). Such relations, to a large extent, result from how parents treated farm animals and how they took care of them. The author believes "that if children did not show the appropriate concern about plants and animals in the house, then only 48% of parents paid attention to it and the remaining number of parents did not take care of children looking after their important duties. They help them by doing things for them and talking nothing about it to them. In such a way, they overtake children's responsibilities, tasks and their activities. The data shows that family is not completely prepared for the ecological education" (Domka 2004, p. 58). The parents, who in a caring way look after animals, shape the same attitudes while bringing up their children and create the feeling of their responsibility for their own lives.

Another hypothesis is based on the fact that children's knowledge of nature can be developed due to the presentation of interesting television programmes, books as well as magazines connected with the subject of nature. Therefore, parents were asked how often they bought their children this type of literature. The majority, i.e. 59%, answered that they rarely bought nature books and magazines. 33% of parents did not buy books and magazines connected with the plant and animal environment at all. However, 10% did it often. The situation looks differently if we consider watching television programmes about nature, since this was indicated by 80% of the students from primary and secondary schools, and only 75% from upper secondary schools. Such a declaration from parents of upper secondary school students can result from the fact that their children are personally interested in this kind of programmes because they want to study related subjects, such as zoology, veterinary medicine or medicine.

In the literature, according to Domka (2004), parents hardly ever talk to their children about the subjects of nature, except for the situations concerning some aspects of television programmes. "Children from the rural areas just like their peers from the city, watch television willingly. Theoretically, the parents do not help them to choose the programmes and they do not criticize many advertisements. As a result, the young recipients create and record undesirable values, examples of the consumers' behaviour" (Domka 2004, p. 58). In the literature, there are no exact examples confirming my hypothesis, but only investigations of the ways in which the mass media influence the young person. According to Maria Anna Wójcik (2004), "the media, and especially the television despite its various advantages (the possibility of easy transfer, easy acknowledgment and perception, and the popularity with its influences) do not play a proper role in the process of general environmental education. The education for Polish society on television focuses first of all on the short transfer, usually dull catastrophic information about the state of the environment. We can observe, however, a better possibility of using the cable and satellite television, transmitting programmes about nature and the environment. Series of reliable, educational programmes dealing with the discussed subjects are rare" (Wójcik 2004, p. 177).

The last of the hypotheses indicates that spending free time in parks and nature reserves influences the process of shaping attitudes in favour of nature. The analysis of the questionnaires only partly confirmed this hypothesis because 82 women (35%) drew their children's attention to different elements of nature, however, only 18 men paid attention to them (26%). The majority of the respondents rarely paid attention to tree and animal species, (116 women - 50 % and 42 men - 62%). 34 women (15%) and 8 men (12%) did not mention this subject. This situation is probably connected with the lack of adequate knowledge about plants and animals. The respondents were also asked to specify to which aspects of their children's behaviour they paid attention to while spending time in parks and nature reserves . The majority of parents gave the following answers:

"We try to explain to the child why we should follow the regulations of parks or nature reserves"

"We teach a child not to litter in the forest or not to destroy protected species"

"We paid attention to the appropriate behaviour, i.e. silence and to the attentive observation of the surroundings"

Summing up the above mentioned results of the investigations, we can refer to Domka's analysis (2004) who states that "parents seldom speak to their children about the ecological subjects. The parents do not react to their children's bad behaviour in favour of nature except for drastic cases. They seldom spend time explaining the problems concerning the ecological threats, possibility and the need of the environment protection, its values and validity for the human being" (Domka L. 2004, p. 58).

On the basis of the received results of the investigation, it can be affirmed that my hypotheses and the problems were confirmed to different degrees. The parents' declarations do not often go together with the observations and investigation of the students' and their behaviour. The parents know how to shape their children's attitudes in favour of nature, however, they seldom follow this in real life and they do not set a good example of how to behave in the natural environment. The development of children's attitudes should have a deep character, and should take place in close co-operation of the family and school, councils, educational and cultural centres. Only in this way can we teach the young generation about the proper attitudes connected with protection and formation of the environment, as well as human's activity in the environment. Apart from that, the co-operation should result in the growth of ecological consciousness and a life in agreement with the natural laws.

Conclusions

The analysis of the investigation results allows us to draw the following conclusions:

- 1. Developing interests, shaping attitudes in favour of nature as well as developing school knowledge are aspects which are shaped under the influence of children's participation in trips and field activities;
- 2. Parents most often shape their children's attitudes in favour of nature by taking care of plants in gardens near their houses;
- 3. Parents prefer television nature programmes to literature dealing with the same subject matter as a source of environmental education for their children;
- 4. Parents rarely draw their children's attention to names of trees or animal species in parks and nature reserves. However, they teach them how to behave in such areas;
- 5. The shaped attitudes in favour of nature are reflected in positive attitudes towards animals and plants. For instance, by feeding animals, children most often help them in difficult situations;
- 6. Not without significance is that parents promote healthy lifestyles with regard to body hygiene or good nutrition of children;
- 7. Attitudes in favour of nature are developed mainly by spending free time together, e.g. parents' participation in trips to zoological gardens together with their children;
- 8. Pro-ecological attitudes of parents are signalled to children by setting good examples such as: water and energy saving, waste segregation, or less frequent use of disposable bags in everyday life;
- 9. On the basis of the conducted investigations, solution suggestions relating to the realization of educational projects were initiated.

References

Cudak H. (1995). Szkice z badań nad rodziną. Kielce: Wydawnictwo WSP.

Domka, L. (2001). Dialog z przyrodą w edukacji dla ekorozwoju. Warszawa, Poznań: PWN.

- Domka, L. (2004). Kształtowanie postaw ekologicznych u dzieci działaniem na rzecz ekorozwoju. *Edukacja biologiczna i środowiskowa*, 2(3), 10–11.
- Dzierżak, M. (2008). *Rola rodziny w kształtowaniu postaw przyrodniczych*. BSc Thesis. The Jan Kochanowski University of Humanities and Sciences in Kielce.
- Pilch, T., & Bauman, T. (2001). *Zasady badań pedagogicznych. Strategie ilościowe i jakościowe.* Warszawa: Wydawnictwo Akademickie "Żak".
- Wójcik, A. M. (2004). Rola mediów w kształtowaniu postaw prośrodowiskowych osób dorosłych. *Edukacja biologiczna i środowiskowa*, 2(3), 10–11.
- Żeber- Dzikowska, I. & Bartoszczyk, J. (2007). Znaczenie nauczania biologii w kształtowaniu osobowości ucznia. Kielce: Wydawnictwo Akademii Świętokrzyskiej.

[178]

The role of the family in shaping attitudes in favour of nature

Abstract

The role of the family in shaping the attitudes in favour of nature is connected with the problems of the family as a basic social group, its functions in creating children's personalities, children's position in the social group, positive and negative parental attitudes, types of parental attitudes as well as developing children's and young people's interests at different educational levels. In order to show the role of the family in shaping the attitudes in favour of nature, an investigation was conducted among parents of pupils and students from primary, lower secondary (*gimnazjum*) and upper secondary schools.

The results of the conducted investigations support the view that parents often shape their children's appropriate attitudes in favour of nature by introducing proper principles connected with the environment protection as well as by participating in various events. Taking care of animals and plants influences the development of children's awareness of nature to a large extent. However, parents seldom buy nature books and magazines in order to make children interested in the discussed matters. The content-related knowledge is too low to allow the parents to talk to children about animals and plant species.

Dr Ilona Żeber-Dzikowska Division of Biology Didactics and Environment Protection Institute of Biology, The Jan Kochanowski University of Humanities and Sciences in Kielce ul. Świętokrzyska 15, 25-406 Kielce, Poland sdzikowski@sniadek.pl