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Agata Wołowska

Uniwersytet Mikołaja Kopernika w Toruniu

Ewa Górska

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EXPERIENCING STRESS BY PRIMARY SCHOOL STUDENTS

Introduction

The notion of stress is known to all modern people, however when talking about it we mainly mean the world of adults. But it is not only adults who live with stress, children experience it too in their everyday life: at school, at home, among friends and even in their free time.

Stress cannot be fully eliminated from human life because it is necessary for survival, dealing with new situations and attempting new, developing activities. However long-lasting, chronic stress can affect the organism in a destructive way. It is especially dangerous for a young and developing organism because it can disrupt its functioning for the whole life. This is why it is important for adults to teach children how to recognise the symptoms of stress and especially to teach them how to cope with it. This ability enables living a dignified and relatively happy life, enjoying personal and professional development in adult life and also it will help next generations deal effectively with difficult situations. What is more, children who learn how to recognise and control stress will be less vulnerable to damaging diseases as adults.

Modern day children are under a lot of pressure to succeed, to say 'no' to drugs and premature sexual life and to cope with a world full of violence. The family situation changes as well and children do not have enough protection against stress experienced too early. It means that younger and younger children experience more and more difficult situations. As a result the symptoms of stress-derived diseases can already be observed in very young people, a risk of the occurrence of these diseases in later stages of life is also higher.

The notion of stress

Stress is not an easy to define notion. It is used in reference to the situation when we have little time and live in a hurry, but also to describe constant irritation, arguments and every-day troubles. Stress can also mean external stimuli which disrupt our life and internal reactions of the organism such as headache and exhaustion¹.

Over the years many definitions of stress have been formulated. Stress is defined as 'a combination of interconnected processes in nervous system which constitute the general reaction of an individual to the extraordinary, difficult, disruptive, threatening, unpleasant, harmful stimuli and substances called stressors'² or as 'a combination of processes including negative emotions and a series of physiological changes occurring as reaction to all types of factors, psychological traumas, failures, dangers, harms, thermic shocks which are disadvantageous to the subject³. According to the definitions included in the psychology dictionary, stress means 'a state of psychical tension triggered by forces or pressures' or 'any force which when used against the organism results in a significant change, usually with connotation that it is a distortion or deformation⁴. Stress is also defined as a group of external factors disturbing normal functioning of an individual⁵ or 'is

¹ R. Portman, Dzieci a stres. Istota zagadnienia, Kielce 2007.

² W. Pomykało (ed.), Encyklopedia pedagogiczna, Warszawa 1993, p. 742.

³ J. Siuta (ed.), *Słownik psychologii*, Kraków 2005, p. 270.

⁴ A. S. Reber, E. S. Reber, Słownik psychologii, Warszawa 2005, p. 748.

⁵ W. Oniszczenko, Stres to brzmi groźnie, Warszawa 1998.

a universal response to all kinds of evil that happen to us'⁶. The transactional definition of stress, however, defines stress as a transaction occurring between an individual and their surroundings. Such a transaction includes an evaluation of challenges posed by a specific situation and the resources of coping with it as well as physiological and psychological reactions to challenges evaluated in this way⁷.

Generally, stress is considered as something harmful because all situations, both positive and negative, to which we have to adjust, are stressful⁸.

Sources of child stress

The research on stress indicated that during one day we are subject to approximately thirty small acts of stress caused by various little but irritating things. The cumulated effect of those small problems may turn out to be more harmful to physical and emotional health than one major catastrophe⁹. And, as it is for us adults, for modern day children, stress became an inseparable part of life, they constantly have to learn new roles, they compete when pursuing success and achieving what is necessary. More and more children are raised in one-parent families or families full of conflicts or even violence. Schools are often over-crowded and full of dangers. Younger and younger children are exposed to the effect of stress, they often experience violence themselves or get to know it from movies, computer games or ordinary news services¹⁰.

Hart¹¹ pays attention to the excess of all types of stimulation as a source of stress including: media offers, music at each step, loads of consumption goods or the willingness to own fashionable 'gadgets'. The pressure on a child to do well at school, to achieve higher educa-

⁶ W. Łosiak, Stres i emocje w naszym życiu, Warszawa 2009, p. 18.

⁷ G. Bishop, *Psychologia zdrowia*. *Zintegrowany umysł i ciało*, Wrocław 2000.

⁸ R. C. Carson, J. N. Butcher, S. Mineka, *Psychologia zaburzeń*, Gdańsk 2003.

⁹ G. Witkin, Stres dziecięcy, Poznań 2000.

¹⁰ R. Portman, op. cit.

¹¹ A. Hart, Twoje dziecko i stres, Warszawa 1995.

tion as it gives a change to get a well-paid job and have comfortable adult life, is also very strong. Modern day children are busier than earlier. Whole days are full of classes at school, extra-curriculum classes, sport, extra music or dance lessons. Apart from that, family factors are also very important. The family home is not as safe anymore because the life of adults is also under strong pressure and stressed-out parents even unconsciously increase the level of stress in their own children.

One of the stress researchers who believes that stressors are divided into school and family ones is Georgia Witkin¹². As main school stressors she considers: friends, teachers and doing homework, and the family stressors, according to her, include: order of birth, conflicts with siblings, experiencing parents' divorce by children, living with only one parent and life in a reconstructed family (stepparents, new siblings). Other child stressors which most often occur according to Witkin are: sports rivalry and other forms of competition, working mother and the presence of a nanny, visit to the dentist, pocket money problems, travelling alone, contacts with strangers, criticism, being home alone as well as holidays and vacation.

According to the researchers of stress issues, the most stressful experiences for children further include: (1) the loss of a close person which results in despair, sadness, irritation or aggression, (2) growing up in a home where violence is used, in a result of which a child becomes disobedient, aggressive and easily frustrated, (3) being a victim of sexual abuses, which can generate withdrawal and sadness and (4) parents' separation and divorce¹³.

Justyna Trepka-Starosta and Bernadetta Izydorczyk on the basis of the research carried out in the period of 1992–1997 on the group of 1060 children aged 7–15 observed a change in the area of the conditioning of disorder occurrence – from family conditioning (family conflicts, dysfunctional interpersonal communication, improper educa-

¹² G. Witkin, op. cit.

¹³ J. Elliot, M. Place, Dzieci i młodzież w kłopocie: poradnik nie tylko dla psychologów, Warszawa 2000.

tional attitudes) to school conditioning (disturbed relation with peers, social isolation and disturbed relation with an authority)¹⁴.

In school practice, the problem of stress has a significant meaning, both for students and teachers. Kargulowa¹⁵, while conducting research at a primary school, has established that the source of aversion towards school for children, even the good ones, are grades below expectations, dislike of big effort in a limited time, frequent tests, too many difficult lessons in one day. She also indicated the fact that a student's frame of mind at school mainly depends on the teacher – his or her personality, attitude and relation to students. The attitude of parents towards school, environment and its closest surroundings is also of vital importance. If it is negative, a child starts school with reluctance.

The significant stress source among students can also be a fear of mistake, being a disappointment because as Vera Birkenbihl insists 'the more witnesses of our mistakes, the more ashamed of them we are'¹⁶.

Finally, the sources of school stress could also be, apart from emotional stressors (examinations, tests, grades etc.), numerous physical stressors, such as stuffy air or noise¹⁷.

Symptoms of child stress

Children's reactions to stress can take up very different forms. They can reveal as bed wetting, shyness, oversensitivity, telling lies, appearance of imaginary friends, functioning 'half-heartedly', nail biting, reckless behaviours or eating sweets.

¹⁴ A. Margasiński, B. Zajęcka, *Psychopatologia i psychoprofilaktyka*. *Przejawy narkomanii, alkoholizmu, przemocy, zaburzeń psychicznych w rodzinie i szkole oraz możliwości im przeciwdziałania*, Kraków 2000.

¹⁵ A. Kargulowa, Dlaczego dzieci nie lubią szkoły?, Warszawa 1991.

¹⁶ V. F. Birkenbihl, Szkoła bez stresu, Katowic 1999, p. 39.

¹⁷ W. Pomykało (ed.), op. cit.

Witkin¹⁸ divides child stress symptoms into physical, behavioural and emotional. According to the researcher the physical symptoms of stress include: sleeplessness, stomach ache, nausea, headaches and agitation. Some children react to stress with nervous ticks, strange behaviour or a rash. The stress symptoms also include frequent colds, worsening of previously existing chronic physical complaints, neck and neck back muscle tension, dryness of mouth, sweating of hands, trouble waking up and diminished appetite.

Body parts in which the physical symptoms of stress are most often localised:

- 1. Brain: migraine headaches, anxiety, panic fear,
- 2. Heart: vertigos, fainting, quicker heartbeat, chest pain,
- 3. Stomach and intestines: stomach burns, stomach ache, nausea, acute and chronic diarrhoea, indigestion, constipation,
- 4. Muscles: muscle pains, lower back pains, muscle stiffness, strong headaches, teeth bruxism, general jaw pain,
- 5. General: cold hands, cold sweat, rash, breathing problems.

Among the behavioural symptoms of stress, Witkin¹⁹ distinguishes: rage attacks and disorderly behaviours, moodiness and irritation, avoiding company and gloomy mood, teasing siblings, arguments and fights, refusal to go to school, distraction of attention, excessive tendency to cry and day-dreaming.

Some of the behaviours with which the children react to stress also reveal their emotional reactions. The emotional stress symptoms in children include among the others:

- 1. Depression periodic floods of sadness and lowered energy.
- 2. Problems with self-esteem excessive stress connected to failure or disappointment can destroy a child's self-image and create a deep feeling of worthlessness, which in turn enhances the stress. Negative self-image can affect the child's change of personality if it persists for a long time.
- 3. Rage which is the main element of 'fight or flight' reaction in stress.

¹⁸ G. Witkin, op. cit.

¹⁹ Ibidem.

4. Anxiety is an important emotional symptom of excessive stress and a clear signal that a child has no control over stress²⁰.

Stress can also causes changes in the functioning of cognitive processes, which results in our thinking and memory becoming tendentious. The direct effect of stress is also the worsening efficiency of action and performing everyday tasks²¹.

According to Hart²², the symptoms of excessive stress can also include worsening of health condition of children suffering from asthma or allergies, and also the occurrence of behavioural problems, hyperactivity or excessive angriness. Some children can have trouble sleeping, concentrating, they experience nightmares or even bed wetting.

How can we help children to cope with stress?

Stress is experienced by people in an unconscious way. It is important for adults to explain to children that stress occurs as a result of lack of balance between tension and a possibility to get rid of it. One should talk to children about how they understand the notion of stress, how they feel when they are stressed-out and what they can observe when people from their surroundings are under the influence of stress²³.

It would be best if children did not have to experience burdening situations. However, due to the fact that many factors resulting in stress cannot be eliminated – it is impossible. Overcoming stress cannot be just about eliminating household or school requirements because stressors are at the same time beneficial to child's development. Children ought to learn that difficult situations should not be avoided and problems should be solved²⁴.

When teaching children how to cope with stress, adults should remember that strategies of not noticing some serious problems or postponing them are not helpful for children because more often than not,

²⁰ A. Hart, op. cit.

²¹ W. Łosiak, op. cit.

²² A. Hart, op. cit.

²³ R. Portman, op. cit.

²⁴ Ibidem.

the problem will remain and the stress related to it may increase. The avoidance strategy will not allow children to acquire positive experiences of overcoming the problem and it may even lead to permanent stress.

Adults cannot protect children from stress but they can help them through various actions. It is very important for parents and other significant persons to give emotional support, to talk about events which are difficult or unpleasant for a child²⁵.

Children should learn to deal with burdens independently. To achieve this, it is very important to actively support of the child's surroundings. Often, it is enough to have a conversation about stress, to be aware that others also encounter unpleasant situations, a smile of someone close or a hug. For example Persaud²⁶ insists that children's immunity to stress is created by positive warm relationship with at least one of the guardians, lack of early separations or losses of the closed ones and the sense of humour. The significant issue is also a positive example of adults showing proper patterns for dealing with stress of people close to the child²⁷.

The best way to immunise children against stress is to shape their self-esteem²⁸. Among other effective ways of stress immunisation of children, Hart lists: better sleeping habits, keeping fit, teaching relaxation techniques, gradual exposing to the effects of stress and simultaneous teaching of a proper way to overcome obstacles (for example a healthy internal dialogue, providing appropriate amount of rest time).

According to Witkin²⁹ parents can help children to cope with stress by recognising situations which stress them and the ways of reacting to it. When teaching children to cope with stress, adults should use their developmental properties. With kindergarten children, it is

²⁵ S. Seul, *Zmaganie się dziecka ze stresem*, "Edukacja i Dialog", 1999, no 2, p. 20–26.

²⁶ R. Persaud, Pozostać przy zdrowych zmysłach. Jak nie stracić głowy w stresie codziennego życia?, Warszawa 1998.

²⁷ R. Portman, op. cit.

²⁸ A. Hart, op. cit.

²⁹ G. Witkin, op. cit.

possible to use their ability to pretend. Imagination may be the key for escaping stress because the child can master difficult situations in their own bedroom using toys. Children aged 5-8 can use the sense of humour to learn how to deal with stress. Laughter as a reaction to a change gives them the sense of control. Seven-year-old children can use the ability to foresee the future on the basis of past experiences. They can also be encouraged to ease the stress by doing favourite activities such as playing ball, playing cards, contacts with friends. If the child is an introvert they need to be explained that not all problems are possible to be solved alone, that they can always ask someone for help or advice. An extravert should be reminded by parents that there are situations when they can prove themselves by doing something on their own and enjoy their independence. And finally to older children (10–12 years old) can be suggested to use the ability to solve hypothetical situations, to create imaginary public for trying out real difficult situations, and sarcasm which is a socially acceptable way to relieve tension, especially in a peer group.

It is necessary to remember that children can change their strategies of coping with stress but their temper and reactions to stress do not change. It is a result of the fact that temper is inborn and it strongly affects the way of reacting.

Witkin³⁰ suggests encouraging children to take actions in order to make stress manageable for them, first with their parents' help and later independently. It is important to make children aware that stress is a part of life. The sooner parents help children take responsibility for fighting stress, the sooner children will have the sense of control over difficult situations.

In order to teach children the active way of solving problems in the situations of experiencing stress, Portman³¹ suggests applying the following steps: 1) reflecting on the situation and the problem, 2) analysing the problem, 3) changing own behaviour and own assessment of the situation, 4) searching for compromise, 5) making right decisions, 6) trying out solutions, 7) evaluation of the solutions.

³⁰ Ibidem.

³¹ R. Portman, op. cit.

What is more, the researcher suggests several strategies of emotional control: (1) time to relax, (2) 'blowing off steam', i.e. reacting to negative emotions through scream, loud speaking, hitting something, circling, (3) doing something pleasant: listening to the music, dance, singing, (4) applying relaxation techniques, which must previously be taught to children well, remembering that not all children can use the same relaxation technique, (5) instead of a typical relaxation, properly chosen games and rest phases can help children³².

Methodology of the study

Aims of the study, research problems

The main aim of the conducted study was characterising stress among primary school students. Knowing the frequency, sources and symptoms of child stress, it is possible to take on appropriate actions in order to minimise its negative effects and teach children to cope with it. The awareness of the problem of children experiencing unpleasant situations can also affect the change of behaviour in adults who have contacts with children – to more effective actions.

The research problems formulated for the needs of this study were as follows:

- 1) What is the frequency of experiencing unpleasant situation in children's life?
- 2) What are the sources of stress according to children themselves?
- 3) What are the symptoms of stress among children?

Procedure of the study, research tool

The study was conducted in Primary School No. 1 in Lubicz Dolny, administrative district of Toruń, Kuyavian-Pomeranian Voivodeship. To provide reliability and anonymity of the results, each student sat at a separate table and, after finishing the questionnaire, they put it into

³² Ibidem.

an envelope which they personally sealed. The research was carried out during educational class. As a research tool, 'Child Stress Test'³³ was used, which consists of 8 questions (6 of them are closed and 2 are open) and a set of 7 unfinished sentences.

Characteristics of the study group

The study group included students of the second educational stage, i.e. 4th–6th forms. The group consisted of 75 pupils: 38 girls and 37 boys. Number of students in forms: 4th form: 18 students (10 boys and 8 girls); 5th form: 31 students (17 boys, 14 girls); 6th form: 26 students (10 boys, 16 girls).

The study results

Frequency of experiencing stress among 4th-6th form students

The study results show that over 90% of children experience some type of worry. The most numerous group, i.e. 52% admit to experiencing worries sometimes, 24% rarely and 16% very rarely.

	4th Boys	4th Girls	5th Boys	5th Girls	6th Boys	6th Girls	Boys total	Girls total	Chil- dren total	%
Very often	_	-	2	5	2	3	4	8	12	16
Sometimes	1	8	8	6	5	11	14	25	39	52
Rarely	6	-	5	3	2	2	13	5	18	24
Never	1	_	2	_	_	_	3	-	3	4
I do not know	1	1	-	-	1	-	2	1	3	4

Table 1
Frequency of experiencing worry

³³ G. Witkin, op. cit.

Table 1 shows that children who mainly worry very often are 5^{th} form students and 6^{th} form students often have trouble specifying the answer to the question on the frequency of worrying. It is mostly girls that worry.

Stress sources among 4th-6th form students

The conducted study shows that students indicated family as the main stress source (see Table 2). Such an answer was given by 5 of 4th form students, (which is 27,7% of all studied 4th form students), 14 of 5th form students, (which is 45,16% of all 5th form students) and 11 of 6th form students, (which is 42,31% of all studied students in this form).

Table 2
Sources of stress

	4th Boys	4th Girls	5th Boys	5th Girls	6th Boys	6th Girls	Boys total	Girls total	Chil- dren total	%
Family	3	2	8	6	6	5	17	13	30	40
School	1	4	4	5	6	7	11	16	27	36
Friends	_	2	6	8	2	10	8	20	28	37,3
Others	1	-	_	3	1	3	2	6	8	10,7

Note: Children had the option to choose more than one answer, hence the sum of the last column is not always 100%.

Friends are second largest cause of worry for children when it comes to frequency of occurrence (37,3% of the total). It is clear that 4^{th} form students worry significantly less about relations with friends than 5^{th} and 6^{th} form students.

School worries are on the third place and they are the source of stress for 36% of students. The results also reveal that it is the 6th form students that more often than their younger friends choose school as a source of stress.

Other things, such as own future, growing prices of food, accidents and catastrophes or the fate of abandoned animals, about which mass media inform, worry 10,7% of the studied students.

The next stress source under consideration is the sense of control over everyday issues (see Table 3).

Table 3
The sense of decision making on everyday matters

	4th Boys	4th Girls	5th Boys	5th Girls	6th Boys	6th Girls	Boys total	Girls total	Chil- dren total	%
I can decide	1	6	3	4	_	4	4	14	18	24
I have quite a lot to say	2	-	6	8	4	6	12	14	26	34,7
I do not have much to say	4	1	6	2	6	5	16	8	24	32
I have nothing to say	3	1	2	-	-	1	5	2	7	9,3

The most numerous group of students -34,7%, thinks that they have a lot to say about everyday issues, fewer children -32% claim to have very little to say. Little less than 10% of students think that they do not have a lot to say about what they would like to do.

When it comes to experiencing fear in relations with parents, 72% of the studied children experience fear of revealing something to their parents, of which 6,7% always, 33,3% sometimes and 32% rarely (see Table 4).

Table 4
Stress/fear in contacts with parents

	4th Boys	4th Girls	5th Boys	5th Girls	6th Boys	6th Girls	Boys total	Girls total	Chil- dren total	%
Always	_	_	_	3	1	1	1	4	5	6,7
Sometimes	2	3	5	4	3	8	10	15	25	33,3
Rarely	2	1	6	6	4	5	12	12	24	32
Never	6	4	6	1	3	1	15	6	21	28

Among the most stressful life events, the majority of the students studied, 60%, indicated the death of their favourite pet (see Table 5). 41,3% of the sample group experienced stress connected with the birth of younger siblings, and in the case of 26,7%, stress was a consequence of moving out to another city. One child, which constitutes 1,3% of the studied group, experienced death of one of the parents (mother), 8% experienced severe illness of a parent, 9,3% separation of parents, 10,7% divorce of parents, 6,7% another marriage of one of the parents. 18,7% of the sample group experience financial problems in their family.

Table 5
Life events causing stress

	4th Boys	4th Girls	5th Boys	5th Girls	6th Boys	6th Girls	Boys total	Girls total	Chil- dren total	%
Birth of brother or sister	2	3	9	7	4	6	15	16	31	41,3
Moving out to another city	2	3	6	5	1	3	9	11	20	26,7
Change of school	_	2	1	5	2	5	3	12	15	20
Separation of parents	-	-	_	2	3	2	3	4	7	9,3

Table 5 (cd.)

	4th Boys	4th Girls	5th Boys	5th Girls	6th Boys	6th Girls	Boys total	Girls total	Chil- dren total	%
Parents' divorce	-	1	3	_	1	3	4	4	8	10,7
Parent's another marriage	-	_	1	_	2	1	3	2	5	6,7
Family financial problems	-	1	6	1	2	4	8	6	14	18,7
Serious illness of a parent	-	-	2	1	3	-	5	1	6	8
Death of mother or father	-	_	_	_	1	_	1	_	1	1,3
Death of a favo- urite pet	8	3	13	6	6	9	27	18	45	60

Note: Children had the option to choose more than one answer, hence the sum of the last column is not always 100%.

The results presented in Table 6 indicate that 36,5% of the studied children would prefer not to go to school and study, 14,3% of the children would like not to clean the room, 9,5% would be the happiest not leaving the computer and the same percentage would prefer to go to bed later, 7,9% of the children do not want to carry a backpack, and 4,8% of the students would feel better not having siblings and having their own room. Among other answers (12,7%) there were the following statements – it would be good if I did not have to: talk to the neighbour, walk to school, bike to school, be sick, go to church, attend extra English classes, play the piano every day, go shopping.

Table 6
Situations the children would like to avoid

Study Clean the room											
Study Clean the room								•		dren	%
Share the room - 1 - 1 - 1 - 3 3 4,8 with siblings Have siblings		5	2	3	2	5	6	13	10	23	36,5
With siblings 1 - 1 - - 1 2 1 3 4,8 Carry a backpack - 1 - 1 1 2 1 4 5 7,9 Go to bed early 2 1 1 2 - - 3 3 6 9,5 Go away from the computer 1 - 2 1 2 - 5 1 6 9,5	Clean the room	-	-	4	2	1	2	5	4	9	14,3
Carry a backpack - 1 - 1 1 2 1 4 5 7,9 Go to bed early 2 1 1 2 - 3 3 6 9,5 Go away from the 1 - 2 1 2 - 5 1 6 9,5 computer		-	1	-	1	-	1	-	3	3	4,8
Go to bed early 2 1 1 2 3 3 6 9,5 Go away from the 1 - 2 1 2 - 5 1 6 9,5 computer	Have siblings	1	-	1	_	-	1	2	1	3	4,8
Go away from the 1 - 2 1 2 - 5 1 6 9,5 computer	Carry a backpack	_	1	_	1	1	2	1	4	5	7,9
computer	Go to bed early	2	1	1	2	-	-	3	3	6	9,5
Others 1 - 2 1 2 2 5 3 8 12,7		1	_	2	1	2	_	5	1	6	9,5
	Others	1	-	2	1	2	2	5	3	8	12,7

Note: The analysis used the data coming from 63 studied persons who gave an answer to the question.

The data included in Table 7 revealed the reasons of anger in the sample group of students. It shows that children get angry the most often when someone calls them names, bullies or beats them. This answer was given by 37,7% of the group studied; the most of them among 5th form students. Another reason for anger given by the students were arguments with siblings (13,2% of the students studied), shouting of parents and harming animals (9,4% each) and arguments between parents (7,5% of the sample group).

Table 7
Reasons causing the sense of anger

	4th Boys	4th Girls	5th Boys	5th Girls	6th Boys	6th Girls	Boys total	Girls total	Chil- dren total	%
Someone calls me names, bullies me, beats me	2	1	8	4	4	1	14	6	20	37,7
Arguments with siblings	3	1	-	1	-	2	3	4	7	13,2
Parents' shouting	1	_	_	_	1	3	2	3	5	9,4
Harming animals	2	-	-	2	1	_	3	2	5	9,4
Parents' arguments	_	1	1	1	-	1	1	3	4	7,5
Others	2	2	1	2	2	3	5	7	12	22,6

Note: The analysis used the data coming from 53 studied persons who gave an answer to the question.

Among individual answers identifying reasons of anger (22,6%) the following ones were noted – I get angry when: I cannot play outside any longer, when I have to switch off my computer, my mother favours my sister, somebody asks me questions, I cannot go outside, my parents do not let me go to grandparents', parents do not notice me, I have to do homework by myself, when I am not allowed to use the computer, I do not understand the lesson, my sister is always coming into my room, my sister is always taking my clothes without my permission.

Almost 1/3 of the students studied did not give the answer to the question on the reasons causing their anger and, although it is difficult to imagine life without experiencing and expressing anger, not talking about it may result from the fear of criticism which undermine self-esteem.

The following results show situations causing fear (see Table 8). Most of the students under study (28%) are afraid of darkness, and the fear of darkness is declared mainly by 6th form students. The second

place is taken by being unprepared for class – 18%. 12% of the children are afraid of being at home alone, a 8% each – parents' reaction to misbehaviour and bad marks.

Table 8
Situations causing the sense of fear

	4 th Boys	4th Girls	5th Boys	5th Girls	6th Boys	6th Girls	Boys total	Girls total	Chil- dren total	%
Darkness	1	_	1	4	4	4	6	8	14	28
Being unprepared for class	-	2	2	4	1	-	3	6	9	18
Being alone at home	1	-	1	1	3	_	5	1	6	12
Parents' reaction to misbehaviour	-	-	1	1	2	_	3	1	4	8
Parents' reaction to a bad mark	1	_	1	_	1	1	3	1	4	8
Others	1	1	2	3	3	3	6	7	13	26

Note: The analysis used the data coming from 50 studied people who gave an answer to the question.

There were also single answers (26%) concerning child fears -I am afraid when: I have a dream about something bad, when a stranger comes into my house, afraid of small rooms, ghosts, mother is feeling bad again, when parents are arguing, my uncle is drunk, storm, strong wind, the neighbour, my neighbours' dog, when teachers shout, a friend undresses on the playing field.

As it can be seen from the quoted answers, children are afraid of different things. However, the fear of darkness, school and negative reactions of parents are dominating.

In turn, when analysing the situations causing sadness, the students included first of all arguments with friends and situations in which somebody is unpleasant for them, accordingly 17,1% of the sample group in each case (see Table 9). 15,7% of children get sad when

their parents are having an argument. Another reason for child sadness are also bad marks -11,4%, punishment given by parents -10%; death of animals -8,6% no company to play with -7,1%.

Table 9
Situation causing the sense of sadness

	4th Boys	4th Girls	5th Boys	5th Girls	6th Boys	6th Girls	Boys total	Girls total	Chil- dren total	%
Someone is unpleasant to me	2	1	1	4	2	2	5	7	12	17,1
Arguments with friends	-	_	1	2	-	9	1	11	12	17,1
Parents' arguments	1	3	1	3	_	3	2	9	11	15,7
I will get a bad mark	_	1	2	4	_	1	2	6	8	11,4
I have punishment	_	1	4	2	-	_	4	3	7	10
Animals die	1	_	1	1	3	_	5	1	6	8,6
I have no one to play with	1	1	1	2	_	-	2	3	5	7,1
Others	1	1	1	3	1	2	3	6	9	12,9

Note: The analysis used the data coming from 70 studied persons who gave an answer to the question.

Among individual answers identifying reasons of sadness (12,9%) the following ones were noted: spending time alone at home, bad news on TV, mother's long hours of work, thinking about own future, about mother's future, sister's going abroad, friend's moving out, death of somebody close and making mother sad.

Table 10
Positive aspects of having a sibling

	4th Boys	4th Girls	5th Boys	5th Girls	6th Boys	6th Girls	Boys total	Girls total	Chil- dren total	%
Helps me with my homework, supports me	5	5	10	3	4	2	19	10	29	49,2
I have someone to play with, I have company	1	2	5	4	6	3	12	9	21	35,6
I have someone to fight with, to blame	-	_	1	1	-	4	1	5	6	10,2
They do something instead of me	1	-	1	_	-	1	2	1	3	5,1

Note: The analysis used the data coming from 59 studied persons who gave an answer to the question.

According to the results from Table 10, the Best aspect of having siblings for 49,2% of the studied students is receiving help with homework and support. For 35,6% of the children the positive aspect of having siblings is company to play and talk, and also company to argue – 10,2% of the students. 5,1% of the children admitted that it was practical that siblings can do something instead of them.

The children studied indicated also negative sides of having siblings (see Table 11), including – fights and arguments (47,5%) and the fact that siblings can annoy them (20,3%). The rest of the children studied (32,2%), who answered that question do not see any negative sides of having siblings.

Ta	ible 11
Negative aspect	s of having a sibling

	4th Boys	4th Girls	5th Boys	5th Girls	6th Boys	6th Girls	Boys total	Girls total	Chil- dren total	%
Fights, arguments	3	3	7	5	5	5	15	13	28	47,5
Sometimes annoys me	3	1	2	_	2	4	7	5	12	20,3

Note: The analysis used the data coming from 59 studied persons who gave an answer to the question.

The survey included also questions to children about the most frequent causes of their parents' anger (see Table 12). The results explicitly show that most often the parents get angry when their children do not listen to them or they do not behave property (68% of the studied group). The second most frequent cause of the parents' anger are bad marks of their children (18,7%), and the next one – not done homework (12%) and lies as well as not admitting guilt (10,7%).

Table 12
Causes of the parents' anger

	4th Boys	4th Girls	5th Boys	5th Girls	6th Boys	6th Girls	Boys total	Girls total	Chil- dren total	%
I do not listen to them, I do not behave	7	6	14	10	3	11	24	27	51	68
I will get a bad mark	3	1	3	2	3	2	9	5	14	18,7
I will not do my homework	-	-	1	2	6	_	7	2	9	12
I lie, I do not admit guilt	2	1	1	2	1	1	4	4	8	10,7
Others	-	1	1	_	1	_	2	1	3	4

Note: Children had the option to choose more than one answer, hence the sum of the last column is not always 100%.

Three of the persons studied gave also other reasons causing parents' anger: Parents get angry about everything, when I do not want to go to bed; Parents get angry when I come back home late.

Symptoms of stress among the 4th-6th form students

The data included in Table 13 show that among the children studied, the most frequent physical reaction to worrying is headache. It is experienced by 45,5% of the children. The second symptom is stomach ache felt by 36,4% of the sample group.

Table 13
Children's reaction to stress

	4th Boys			5th Girls			Boys total		Chil- dren total	%
Headache	5	2	5	6	3	9	13	17	30	45,5
stomach ache	2	5	4	4	1	8	7	17	24	36,4
Others	1	1	1	3	4	2	6	6	12	18,2

Note: The analysis used the data coming from 66 studied persons who gave an answer to the question.

Twelve students (16%) admit to other reactions to stress such as: the whole body trembling, lip trembling, spine pain, the feeling of chest pressure, vomiting, the sense of hanger, crying, anger and silence.

Next, the children were asked the question on the frequency of having nightmares. As it can be seen on Table 14 - 10,7% of the children in question have them often, 62,7% from time to time, a 26,7% never.

Table 14
$Frequency\ of\ having\ night mares$

	4th Boys	4th Girls	5th Boys	5th Girls	6th Boys	6th Girls	Boys total	Girls total	Chil- dren total	%
Often	-	-	2	3	-	3	2	6	8	10,7
From time to time	4	7	9	10	8	9	21	26	47	62,7
Never	6	1	6	1	1	5	13	7	20	26,7

The other, frequently occurring behaviours in stress situation in the sample group (see Table 15) include – arguments and fights with siblings (53,3%), biting nails (40%), tendency to cry (33,3%) and problems with concentrating when doing homework (30,7%). Next in order are: day-dreaming (25,3%), problems with sleeping (22,7), difficulties in concentrating on lessons at school (21,3%), the desire to be alone (20%) and frequent nausea (4%).

Table 15
Behaviour of children in stress situations

	4th Boys	4th Girls	5th Boys	5th Girls	6th Boys	6th Girls	Boys total	Girls total	Chil- dren total	%
Biting nails	3	5	5	7	2	8	10	20	30	40
Thumb sucking	_	_	_	_	_	_	_	-	_	_
Desire to be alone	6	4	6	1	3	1	4	11	15	20
Arguments and fights with siblings	4	2	11	7	6	10	21	19	40	53,3
Difficulties in concentrating at school	-	-	5	5	2	4	7	9	16	21,3
Difficulties in con- centrating while doing homework	-	_	7	6	4	6	11	12	23	30,7
Tendency to cry	3	2	4	6	2	8	9	16	25	33,3

	4th Boys	4th Girls		5th Girls				Girls total	Chil- dren total	%
Day-dreaming	-	-	3	4	3	9	6	13	19	25,3
Frequent nausea	-	-	1	1	-	1	1	2	3	4
Problems with sleeping	2	2	3	1	1	8	6	11	17	22,7

Table 15 (cd.)

Note: Children had the option to choose more than one answer, hence the sum of the last column is not always 100%.

Discussion

The results obtained in the study indicated that each of the children examined, to a lesser or greater degree, experiences difficult situations. When answering the question of the worries frequency, 16% of the examined children stated that they worried very often, 52% sometimes, 24% seldom, 8% never worry or they do not know whether they worry or not. However, answering the question concerning the causes of worries each child gave at least one reason. These results confirm the thesis that childhood period is not free from concerns and worries, and the frequency of feeling worried by children is considerable.

Moreover, the study results which disclosed that the main source of child stress is, in the following order: family, friends and school, correspond, at the same time, to the division of stressors suggested by Witkin³⁴. The researcher divides the sources of stress into school and family ones. According to the division suggested by her, relations with friends and other school matters are included in school stressors. The study results are, therefore, compliant to the results presented by other researchers who emphasise the important role of school environment as the source of stress among children³⁴.

³⁴ See: A. Kargulowa, op. cit.; A. Hart, op. cit.; A. Margasiński, B. Zajęcka, op. cit.; Portman, op. cit.

At school, the source of stress for the sample group were marks, tests and the necessity to do homework. School duties and, in particular not fulfilling them, are also the reason for stress experienced by children at home. Such sources of school stress are mentioned by the authors quoted earlier and Pomykało³⁵.

In family environment, the most frequently occurring factors generating stress are arguments with siblings, arguments between parents, raising voice when talking to children, punishment for misbehaviour, bad marks at school, not doing homework and telling lies. The source of stress is also lack of company to play with.

Arguments with friends, their lack of understanding, fear of being rejected, insults, fights and teasing are the sources of stress sensed in contacts with peers.

The results obtained showed also that in the sample group, the most frequent stress symptoms are headache and stomachache. These physical symptoms of stress differ from the results of the original study obtained by the author of *Stres dziecięcy* (*Child Stress*)³⁶, as headache there appears only on the fourth place in the list of physical symptoms. The most frequent stress symptoms in Witkin's³⁷ study is sleeplessness.

Among behavioural symptoms, the sample group most frequently mentioned fights and arguments with siblings and peers. Quite o big group admitted to nail biting and problems with sleeping. Such stress symptoms among even small children are discussed by Portman³⁸ and Witkin³⁹.

Emotional symptoms demonstrating stress experienced by children studied include the feeling of sadness, anger, fear and depression. More seldom the answers referred to crying, silence, difficulties with concentration and day-dreaming.

Concluding, it can be stated that the results of the stress study conducted among $4^{\rm th}-6^{\rm th}$ form students in a small suburban school do not

³⁵ W. Pomykało (ed.), op. cit.

³⁶ G. Witkin, op. cit., s. 28.

³⁷ Ibidem.

³⁸ R. Portman, op. cit.

³⁹ G. Witkin, op. cit.

differ considerably from the results of studies described both in Polish and in foreign subject literature. All children under study feel stress and they have to learn how to cope with it, i.e. make cognitive and behavioural efforts to overcome the crisis⁴⁰.

Each of us has some possibilities to cope with stress, i.e. resources. Internal resources include objects, conditions and reserves of energy which themselves can serve as the source of survival, or can be used for obtaining resources allowing survival⁴¹. External resources play also a significant role in coping with stress.

The principal external resource is social support and it is not only about assistance in a difficult situation but also the awareness that there is someone I can ask for help and advice⁴². Therefore, it us just us, adult people – parents and teachers who should make every effort to teach children how to cope with stress and also make sure that feeling unpleasant situations does not lead to chronic stress. And, in order to help children minimise the effects of stress caused by family, friend situations and school duties, cooperation between school and children's parents appears to be necessary.

Streszczenie

Doświadczanie stresu przez uczniów szkoły podstawowej

Głównym celem badania było zidentyfikowanie źródeł stresu, a także jego fizycznych, behawioralnych i emocjonalnych objawów wśród uczniów szkoły podstawowej. Badaniem objęto 75 uczniów z klas IV–VI jednej z polskich szkół. Badanie ujawniło, że: 1) wszystkie badane dzieci doświadczają różnego rodzaju stresu, 2) głównymi stresorami w badanej grupie są kolejno: rodzina, koledzy i szkoła, 3) najczęściej występujące objawy stresu to:

⁴⁰ G. Bishop, op. cit.

⁴¹ S. E. Hobfoll, Stres, kultura i społeczność. Psychologia i fizjologia stresu, Gdańsk 2006.

⁴² G. Bishop, op. cit.

ból głowy i ból brzucha, bójki i kłótnie z rodzeństwem oraz z rówieśnikami, uczucie smutku i złości.

Słowa kluczowe: stres dziecięcy; stresory; symptomy stresu

Summary

EXPERIENCING STRESS BY PRIMARY SCHOOL STUDENTS

The main objective of this research was to identify stressors as well as physical, behavioral and emotional symptoms of stress among primary school students. The study covered 75 students of 4th to 6th grades in one of primary schools in Poland. The research has shown that: 1) all of the children experienced various types of stress, 2) the main stressors in the study group are: family, friends and school, 3) the most common symptoms of stress are: headache and abdominal pain, fights and quarrels with siblings and peers, the feeling of sadness and anger.

Keywords: child stress, stressors, symptoms of stress