SEMINARE

Depression Symptoms, Risk Behaviors, Somatization and Social Support within Two Different Microsystems of Early Adolescents

Symptomy depresji, zachowania ryzykowne, somatyzacja i wsparcie społeczne u osób we wczesnym wieku dorastania

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Received: 30 Oct 2024
Revised: 25 Nov 2024
Accepted: 22 Dec 2024
Online First: 31 Dec 2024

Abstract: The main aim of the study was to find out if early adolescents who attend two different school microsystems i.e. division of high educational outcomes and division of low educational outcomes differ in terms of depression symptoms, somatization, risk behaviors, school stress and the perception of teachers' social support which they receive at school. There were 60 adolescents who took part in the study. The set of five tools was applied as follows: Children Depression Inventory CDI-2 (Kovacs 2014), Children Somatization Inventory – short (Walker et al. 2009), Children and Adolescent Social Support Scale – a subscale 'teachers support' (Malecki et al. 1999), List of Risk Behaviors in Late Childhood and Early Adolescence (Sikora 2016) and a list of school stressors which was created by participants. The results show the medium level of depression symptoms in a whole group and high level of symptoms in girls who attend low outcomes division. The level of somatization is also the highest among girls of low outcomes division. Risk behaviors are declared more often by students of high outcomes division. Social support was viewed differently in two divisions. The teachers' help was connected to the well-being of students and provided protection against the mental costs of being at school. Study results call for closer attention to be put on the school context of early adolescents. The intervention and prevention programs should consider some cultural changes in risk behaviors and in symptoms of somatization declared by early adolescents in the study.

Keywords : adolescence, depression symptoms, somatization, social support

Abstrakt: Celem niniejszego badania było określenie, czy wybrane wskaźniki zdrowia psychicznego, tj. poziom depresyjności, stresu, zachowań ryzykownych, symptomów somatyzacji i poziom odczuwanego wsparcia społecznego, są różne w dwóch szkolnych mikrosystemach, tj. w grupie zdolnych uczniów i w grupie młodzieży osiągającej słabe wyniki. Diagnoza ewentualnych różnic znalazłaby zastosowanie praktyczne np. w planowaniu pomocy psychologicznej. Zastosowano pięć narzędzi badawczych: Inwentarz Depresyjności Dziecka (CDI-2), Kovacs 2014; Inwentarz Somatyzacji – wersja skrócona (Walker et al. 2009); Listę Zachowań Ryzykownych (Sikora 2016); Skalę Wsparcia Społecznego Dzieci i Młodzieży (Malecky et al. 1999) oraz Listę Stresorów Szkolnych stworzoną przez młodzież uczestniczącą w badaniu. Badano osoby w wieku 13-14 lat (M=13,41; SD=0,5). Wyniki badania wskazują na różnice występujące między osobami z klas, do których uczęszczają uczniowie uzyskujący wysokie wyniki edukacyjne, a dorastającymi, którzy mają niskie wyniki, z innego oddziału. Niekorzystne są symptomy depresji i somatyzacji w grupie osób uzyskujących niskie wyniki. Stwierdzono także różnice w odniesieniu do konkretnych zachowań ryzykownych, postrzeganego stresu i wsparcia społecznego. Grupą, która ponosi niepokojąco wysokie koszty stresu szkolnego i innych wyzwań dorastania, są dziewczęta, które uzyskują niskie wyniki w szkole. Potrzebują one pomocy dorosłych, którzy na co dzień z nimi pracują, oraz adresowanych do nich programów terapeutycznych..

Słowa kluczowe: dorastanie, symptomy depresji, somatyzacja, wsparcie społeczne

INTRODUCTION

The number of young people suffering from depression remains high and according to some studies it even increases (Gariepy, Honkaniemi and Quesnell-Vallee 2016, 284). Therefore, it is clear that looking for both causes and prevention factors is the aim of many research projects. Much is already known about social factors contributing to the etiology of adolescents' depression symptoms. However, the prevalence of studies look for parent and family contributors such as parenting styles, communication, family disease history, economic status, parents' education, family stressors, the number of siblings, living conditions and others. It is still not much known about microsystems such as school divisions and social groups constituting the 'class organism.' Do they alleviate or bust adolescents' well-being in terms of depression symptoms' perception?

School microsystems coexist with home microsystems. Urie Bronfenbrenner states that "Interpersonal relationships, even at the smallest level of the parent-child relationship, do not exist in a social vacuum but are embedded in the larger social structures of community, society, economics and politics…" (Bronfenbrenner 1979, 9-10). For children and adolescents school microsystem is a second close to their home contexts. A student of 8th grade spends about 30-34 hours at school per week (see: Kształcenie w Szkołach Podstawowych: www.euridice.com) Majority of schools offer extracurricular activities which extends this time to even 40 hours per week, similarly to the time spent by an adult person at work. It is a serious mental and physical burden for an adolescent. During the time spent at school many social interactions take place and a lot of stress might happen. Knowing that home stress contributes to depression symptoms it is worth to find out if school psychological and social context acts similarly.

1. SCHOOL CONTEXT AS A SOURCE OF STRESS

School stress usually happens within the following transactions: students-teachers, peers-students and parent(s)-students. Richard Lazarus defines stress as a situation in which the individual perceives the lack of resources to cope or to manage the difficulty (Lazarus and

Folkman 1984, 11-12). Among teacher related stressors pupils often declare to fear that the teacher will give them a low mark, will not bother to take time and explain some difficult school questions, will show hostility, will check the knowledge or will not give enough time for studying and preparation (Demaray and Malecky 2002, 306).

According to adolescents' declarations, being not accepted by peers is a huge stressor. Nearly all young people suffer from the fear that they will be rejected or treated badly by their school mates. Teasing, being let down by a close friend, the fear of being picked on or talked about in a humiliating way in the internet or in the real world is also a peer stressor. Being a prey of bullying or other kinds of oppression are examples of extreme stressors which happen at school (Demaray and Malecky 2002, 314).

Parent-child stressors may be present though adolescents give less importance to their adult caregivers' opinions. However, most parents and caregivers control their children's school achievements and therefore one crucial stressor appears: the fear that school outcomes will cause the adults' dissatisfaction (Gibbons and Olmo 2011, 313-314).

The last category of school stressors comes from the adolescents' personal attitudes towards school. The students with high outcomes usually fear about their success and some of the low outcomes students feel bad about the trouble to pass tests which would allow them to be promoted. All the students feel a lack of comfort when treated badly by school staff or peers. Girls report more social stress than boys. They also more often trouble about their 'handsome look' (Taylor et al. 1998, 33).

These and other stressors which were not listed above (for example the amount of time spent on studying) are part of adolescents' life and are part of individual transitions demands. The presence of depression and somatization symptoms, as well as engaging in risk behaviors may indicate that the individual feels overwhelmed by school demands (Feusser et al. 2022, 1-2).

2. Depression Symptoms, Somatization and Risk Behaviors

Despite the fact that families' economic and social conditions have been improving in Poland which results in decent living contexts, the number of young people who are in psychiatric treatment increases. Half a million of children and adolescents in the age between 7 and

17 suffer from phobias, fears, anxiety, indecisiveness and lack of will to live or other poor mental conditions (see: National Program for Health Prevention, 3). Depression is the third recognized cause of premature death in adolescents entering adult life (see: World Health Organization 2021). Students who declare high levels of depression are usually those who demonstrate boredom, tiredness, lack of school motivation, withdrawal from social interactions, and sometimes sleepiness at school. Teachers who are alarmed by the change of pupils' behavior and mental condition often recognize other signals of mood disorders. A huge part of them refer to emotional individual's condition: anhedonia, irritability, fear, somatization, anger, anxiety, low mood, guiltiness, low esteem and self-depreciation. Social contacts may change from withdrawal to high dependency while cognitive functioning of the student nearly always deteriorates. This results in poor educational outcomes (i.e. lower grades, lower test performance, lack of activity) (Kohei and Yugo 2021).

Somatization, i.e. experiencing pain or discomfort that has no physical origin is a problem mainly among younger adolescents and children. School medicine staff observes the intensifications of these symptoms at stress peak times. It may be associated with standard testing time, timing (the end of the school semester or school year) or individual difficulties in coping with school or home demands. The reports of school medical rooms show that the symptom reported by younger children as most frequent are a stomachache or a headache (Torsheim and Wold 2001, 301; Sikora 2019, 88-89; Essau et al. 2013). However, when gathering the data from numerous samples twenty or even thirty various body issues can be found. Typical symptoms reported are having nausea or upset stomach, feeling like fainting, experiencing dizziness, suffering from various pains, being weak, and having trouble in breathing. Less often are numbness, tingling, loosing BM, diarrhea, blurred vision, losing voice and feeling floated or gassy. Essau (2013) proposes 4 categories that can sum up somatic problems: cardio-symptoms, gastro-symptoms, pain/weakness and neuro- symptoms. All the symptoms reported at school may indicate poor mental condition of the pupil and can be her/his calling for help.

Risk behaviors are these actions which are of potential harm for young people. They depend on age and gender of the adolescents. For example: smoking, drinking alcohol, fighting verbally and physically, watching shows for adults and occasional school truancy are reported

by younger youths. Risk sex contacts, actions expressing the need for novelty exploration, binge drinking, regular school truancy, debt having, breaking law, psychoactive substance usage are found in the studies with the participation of older adolescents. While in early years of puberty little genders differences are present, with time gender differences are more visible among girls reporting lower aggression levels, lower substance levels and higher levels of internalization (Sikora 2016, 175-176). Risk behaviors most often happen during 'after school' time, however some of them still take place at school. Young students smoke cigarettes (nowadays they are nearly always electronic ones) engage in fights, take some unnecessary medicines (i.e. when trying to avoid work and pretend sickness), occasionally skip some lessons. The other school risk activities relate to risk fun seeking i.e. jumping from the heights (windows, roofs) or leaving school building in the need of fast visiting the nearby shop. This kind of behavior can be a predictor of future depression and therefore it is worth monitoring, especially at the early stages of life (Bai et al. 2018, 1005)

3. Social Support as Guarding Agent

Teachers' social support is proved to be one of the strongest buffers against experiencing poor mood, somatic symptoms and some risk behaviors at school (Kohei and Yugo 2021). There are several proposals to explain that fact. First, showing positive emotions towards pupils makes them feeling safe and convinced that they can ask for help whenever they need it. Second, the support is often connected with the guidance, which means that some stressors will not happen as prevented by informative or appraisal feedback. Third, the support builds up a conviction of worth and beneficial self-esteem in pupils who receive it on a regular base. When teachers provide support bullying is less likely to happen since constant interest of adults works as buffer against the peer violence. Teachers' support is also connected with students' academic achievements. Taking time and effort to explain new problems, letting students to ask questions, recognizing pupils learning styles and needs, providing guidance are among often cited components of teachers' informative support. The most protective factor however is high level of the emotional support. It was found that warm, caring and sincere attitude of teachers was the strongest agent of students' high spirits and that there is strong relationship between liking the teacher and the readiness to be and work at school (Sikora 2019, 94).

4. Two Contexts

The features of social context may contribute to the lack or presence of mental well-being of individuals. Some of these features are: the level of stress, the amount and type of social support available, social resources to cope and demands which are to be tackled. As far as children are concerned the following appeared to be protective factors: two parents family, high socioeconomical status (SES), family cohesion, a good fit of children needs and parents' help, democratic parenting styles. Contrary, lonely parentship, harsh family economic condition, lack of support, parent's physical or mental sickness, high levels of conflict relate to higher risk of stress costs (Yoon 2022, 2). School context features appear to be similar to the home ones. Again, social support, the level of perceived school stress, teachers and peer demands, resources to cope may influence adolescents' well-being. What is more, each class community is characterized by its own features that constitute the 'class climate.' As proved in previous research the atmosphere of learning and spending time together determines academic motivation and students' moods (Al-Tameemi 2023).

Of particular interest to scientific and practical search is finding the answers for the following questions: does grouping adolescents into divisions which consist of high and low outcomes students have any consequence for the 'mental climate' of the school division they attend? Do students in the two settings have similar or different levels of depression symptoms? Do they suffer from somatic responses alike? How do they perceive support which they get from the teachers ? What is the level of risk behaviors they seek and experience? The mental health indices mentioned above can be a consequence to the aims and strategies employed by students at school and they also reflect how high and low outcomes students function at school.

The high outcomes students receive high marks, they do great in standard tests, they have few, if any, behavioral referrals and have a low level of school absenteeism. The low outcomes students have problems with getting satisfactory marks and according to teachers' reports they have low motivation to learn and to be at school. Some low outcomes students have many behavioral referrals due to their inappropriate actions at school (being loud and/or aggressive, interrupting the lesson, using inappropriate language, showing no respect and no will collaborate). High outcomes students use 'work and achieve' and 'focus on the problem' strategies

while low outcomes students are prone to apply 'withdraw and avoid' strategy (Sikora 2023, 150-151). We may assume that the costs of coping with school demands might be different in these two groups, and it is not clear which group bears higher psychological costs in terms of somatization, risk behaviors and depression symptoms.

The main aim of this study is to answer the following questions:

1) Are there any differences in depression symptoms perception between the group of early-stage adolescents who attend high outcomes and low outcomes divisions?
2) Are there any differences in somatization symptoms in the groups mentioned above?
3) Are there any differences in risk behaviors between the division with high outcomes and low outcomes students?
4) What is the level of school stress in these divisions?
5) Is teachers' social support connected with the mental well-being of the students?

5. METHODS AND MATERIALS

The study was conducted in 2023/24 school year, and it was a second part of research project which aimed to check if there are disparities between the high outcomes students and the low outcomes students in terms of psychological and social functioning. Specifically, at this stage of the project the aim was to find out if these different microorganisms vary when the mental costs of being at school are concerned. The study group was designed to consist of a group of students who attend two school divisions at the same level (8^{th} grade) and in the same school. Participants ideally should have the same teachers, teaching programs, school schedule, school materials (books, exercise books, software manuals). The main difference between divisions was meant to be school outcomes (grades, the number of honor roll students, the level of absenteeism and the number of school referrals) high in one division and statistically lower in the other division. The conditions of study sample were met, except for the teachers. The majority of teachers in these two divisions were the same but a couple were different (P.E. and English teacher). The study group was rather small, which resulted from the criteria we were seeking for. This, however, allowed to provide quite unique data as to the author's knowledge no studies embraced such a study group. Table 1. presents the differences between school

outcomes of two studied divisions measured on the occasion of the external test which was run at school in 2024.

Table 1. Differences in educational outcomes between two microsystems.

External exam scores: Polish, maths and English

High outcomes division		Low outcomes division			
M	SD	M	SD	p	t
85,4	6,8	54,8	25,01	0,001	3,3

High outcomes division		Low outcomes division			
M	SD	M	SD	p	t
74,2	27,9	34,8	30,07	0,001	3,55

High outcomes division		Low outcomes division			
M	SD	M	SD	p	t
85,9	17,5	52,13	17,5	0,001	3,23

Note: Maximum score for each subject was 100 points. Means and standard deviations show different scores of divisions in points.

Initially, 62 students took part in the study. Two sets of questionnaires were deleted from further statistical analyses due to the school absence of adolescents who were not present at all three study meetings. Eventually, there were 32 girls and 28 boys who fully took part in the study. The participants were 13- or 14-year-old (M= 13,51; SD= 0,50). The only demographic data which we asked about were the age and the gender of the participants. Classes' tutors provided information that 71% of the adolescents lived with 2 parents and 29% of students with 1 parent or in a shared custody. There were no statistical differences in groups concerning the gender and age of participants. Two participants were Ukrainians (living in Poland for 3 years and speaking fluent Polish), 58 were native Polish, raised by at least one Polish-speaking parent/guardian.

Five tools were applied: 1) Children Depression Inventory-2 (Kovacs 2014); 2) Children Somatization Inventory – short (Walker et al. 2009); 3) Children and Adolescent Social Support Scale – a subscale 'teachers support' (Malecki et al. 1999); 4) List of Risk Behaviors in Late Childhood and Early Adolescence (Sikora 2016). The fifth tool was a List of School Stressors

which was created by participants prior to the study. The list contained 15 most often experienced stressors declared by the students themselves and later agreed with school psychologist. At one week interval r-Pearson for the list was computed showing constant answers of participants (r =.82). The questionnaires applied in the study were tasted on large samples, and they have high stability and reliability. Likert scales' extensions are enclosed to the tables.

There were 3 meetings in each division to fill in 5 questionnaires (altogether 6 meetings). The study took place in the school classrooms. Each meeting took 15-20 minutes. Students were encouraged to ask questions whenever they had any questions. Before filling paper inventories, a short introduction by the psychologist was given. Participants were informed about anonymity and were asked to pick up a nick and use it on every occasion of the study so that it would be possible to pair sets of questionnaires filled during the three meetings. Participants were informed that all the results would be used only for scientific purposes. Joining the study was voluntary.

The study was conducted not by the software means which is faster, more convenient and can embrace bigger samples. A pilot study had shown that numerous boys pressed just one button to skip the effort of filling the questionnaire. Thus, the paper study was regarded as more reliable procedure. It was also run in small groups which enabled friendly 'supervision.' A small chocolate snack was offered as a thank you gift for the participation.

The study was preceded by School Parents Council approval and individual parent consent. Applying Children Depression Inventory (CDI-2) and other four tools were approved by the school psychologist who worked daily with the participants.

6. Results

To answer the question if there are differences in depression symptoms perception between the group of early stage adolescents who attend high outcomes and low outcomes divisions the results in Children Depression Inventory were compared. The results show that students of low outcomes division perceived more symptoms than the students of high outcomes division. This is due to girls' results. The boys of two divisions declared similar intensity of symptoms while there was a statistical difference between the girls. The results are shown in Table 2.

Table 2. The level of depression symptoms in 13-14 y/o adolescents.

Depression symptoms score					
High outcomes division		Low outcomes division			
M	SD	M	SD	p	t
13,36	7,29	17,76	7,9	0,04	2,14
High outcome girls		Low outcome girls			
M	SD	M	SD	p	t
15,80	5,67	21,3	6,87	0,05	2,042
High outcome boys		Low outcomes boys			
M	SD	M	SD	p	t
12, 00	6,02	9,58	5,03	0,37	0,69

Note: according to the author of CDI, results 11-18 – indicate medium level of depression and 19-54 high intensity of depression symptoms.

It is also worth to focus on the level of depression symptoms declared by the participants which shows that 13–14-year-old adolescents declare medium intensity of the symptoms (see note below the table 2). There were four symptoms which were indicated by participants most often (1) 'feeling irritated/or in bad mood;' (2) 'worrying;' (3) 'trouble to force myself for schoolwork/study' and (4) 'quarreling/having verbal fights with others.'

Items (1) 'I am not sure if somebody loves me,' (2) 'when something goes wrong it is my fault' and (3) 'I want to cry everyday' received the lowest number of indices.

Next, the data from Children's Somatization Inventory of the two divisions were compared to find out if there were differences in somatic symptoms. No difference was found between the groups – high outcomes division and low outcomes division. However, there was statistical difference between girls from the low outcomes division who declared higher levels of somatic symptoms than the girls from the high level outcomes. None of the somatic symptoms (headache, stomachache, dizziness, abdominal pain, pain of any origin, blurred vision, etc.) scored 'often' which mean that somatization was a rare burden for participants. After receiving the data from students, we asked them to answer additionally the following questions: 'Are you feeling tired at school?'; 'Do you feel sleepy when in classroom?' and 'Are you bored

during lessons?' Students indicated the responses on 4 point Likert scale (4 – always/nearly always; 3 – often; 2 – seldom; 1 – never/hardly ever). The whole group's answers were as follows: question nr 1 = 3,36 (more than often); question nr 2 =3,36 (more than often) and question nr 3 = 3,29 (more than often). None of the typical somatic symptoms scored that high. The level of all somatic symptoms is presented in Table 3.

Table 3. The level of somatic symptoms in 13-14 y/o adolescents.

Somatic symptoms score					
High outcomes division		Low outcomes division			
M	SD	M	SD	p	t
2,23	0,52	2,38	0,64	0,4	0,85
High outcomes girls		Low outcomes girls			
M	SD	M	SD	p	t
2,01	0,56	2,61	0,31	0,002	3,51
High outcomes boys		Low outcomes boys			
M	SD	M	SD	p	t
2,47	0,59	2,02	0,57	0,14	1,31

Note: participants indicated experienced somatic symptoms on 4-point Likert scale [1 – never/hardly ever; 2 – seldom; 3 – often, 4 – always/nearly always]. Mean result shows frequency.

The number of risk behaviors was then analyzed and compared. Participants declared drinking energy drinks (60%); chatting with unknown person on the internet and jumping from high objects (53%); staying out late i.e. later than 10 pm. (51%), smoking electronic cigarettes (41%) and watching 16+ content (40%). There were statistical differences between two divisions. The students of the high outcomes divisions declared watching more 16+ content and more often succumbed behavior towards some peer adolescent ('you do something not because you want but because somebody is pressing') than students of low outcomes division. The results are shown in Table 4.

Table 4. The type of risk behaviors experienced by 13-14 y/o adolescents.

Risk behavior	Risk behavior score		
	High outcomes division	Low outcomes division	p
Wine drinking	5%	13%	0,08
Beer drinking	5%	5%	0,32
E- cigarette / cigarette smoking	32%	52%	0,17
Speed seeking	41%	39%	0, 90
Jumping from high objects	50%	57%	0,66
Staying out late	50%	52%	0,88
Succumbed behavior	41%	13%	**0,04**
Putting personal info on internet	41%	17%	0,08
Chatting with strangers on internet	59%	48%	0,56
Watching 16+ content	55%	26%	**0,05**
Unnecessary medicine taking	14%	9%	0,61
Prefering much older friends	36%	30%	0,91
Energy drinks consuming	50%	65%	0,47
Seeking an occasion to fight	23%	9%	0,21

School stressors were estimated and compared within the two groups of students. There were three categories of school stressors: peer related, teacher related, and general school concerns. Each item was compared to check if there were any disparities in school stressors' perception. Only one difference was found between the two groups of students. The students of low outcomes division declared higher fear on parents' angriness when they receive low mark at school when compared with students from the high outcomes division. Out of 15 different school stressors four were declared as burdening (according to the result that scored 'often'): 'the teacher will check my knowledge'; 'I fear about my final exam result'; 'the teacher will not explain a new material and I will have a problem'; 'I will get the bad mark.' Other stressors were perceived as less stressful. The data on school stressors perception in two divisions are presented in Table 5.

Table 5. Stressors declared by 13-14 y/o adolescents.

School fears	**High outcomes division**		**Low outcomes division**			
I fear that ….	M	SD	M	SD	p	t
Somebody will tease me	1, 78	0,71	2,04	0,95	0,32	1,05
Somebody will make fun of me	1, 78	0,79	2,17	0,96	0,17	1,30
Somebody will hit / beat me	1, 50	0,69	1,43	0,77	0,78	0,68
I will have no friends to talk to/be with	1, 67	0,94	2,09	1,02	0,19	1,30
Somebody will report me to the teacher	2, 00	0,67	1,91	1,02	0,74	0,70
Somebody will make a joke of me on the internet	1, 50	0,6	2,00	1,1	0,08	1,75
The teacher will give me a poor mark	2, 17	0,69	2,43	1,01	0,33	1,05
The teacher/s will be angry with me	2, 28	1,15	2,00	1,06	0,44	1,15
The teacher will check my knowledge	3, 00	0,94	3,09	0,83	0,76	0,66
The teacher will not explain new material	2, 67	1,05	2,48	0,83	0,54	0,68
The teacher will give me a behavioral referral	2, 17	0,76	1,65	0,91	0,06	1,90
I will get the worst mark	2, 50	0,69	2,65	0,96	0,56	0,67
My school outcomes will be poor	2, 11	0,87	2,57	0,97	0,13	1,10
My parent will be mad at me for my grades	1, 67	0,58	2,26	1,15	**0,04**	2,30
About my final exam result	2, 89	0,94	3,17	0,87	0,33	1,06

Note: participants indicated experienced stressors on 4 point Likert scale [1 – never/hardly ever; 2 – seldom; 3 – often, 4 – always/nearly always]. Mean result shows frequency.

Finally, the results in Children and Adolescent Social Support Scale were analyzed and compared. There were four types of social support measured: appraisal, informative, emotional and instrumental. Statistical differences in perceiving social support were found. The students of the low outcomes division declared receiving more help from teachers than high outcomes support. Specifically, boys of low outcomes division perceived more emotional and informative help than boys from high outcomes division. There were no differences between girls in two divisions. The results are shown in Table 6.

Table 6. Social support reception declared by 13-14 y/o adolescents.

Social Support Perception						
	High outcomes division		Low outcomes division			
	M	SD	M	SD	p	t
Appraisal	3,63	0,84	4,07	0,85	0,09	1,70
Informative	3,40	1,03	4,00	0,94	**0,05**	2,02
Emotional	3,06	0,89	3,85	0,89	**0,01**	3,20
Instrumental	2,92	1,00	3,14	0,73	0,41	0,85
Composite	3,28	0,71	3,81	0,71	**0,02**	2,42
	High outcomes girls		Low outcomes girls			
	M	SD	M	SD	p	t
Appraisal	3,37	0,86	4,00	0,88	0,10	1,72
Informative	3,47	1,11	3,74	0,77	0,53	0,79
Emotional	3,40	0,90	3,86	0,82	0,23	1,30
Instrumental	3,00	1,15	3,00	0,68	1,00	0,00
Composite	3,33	0,88	3,69	0,61	0,29	1,05
	High oucomes boys		Low outcomes boys			
	M	SD	M	SD	p	t
Appraisal	3,86	0,78	4,19	0,82	0,37	0,84
Informative	3,36	1,02	4,41	1,09	**0,04**	2,25
Emotional	2,78	0,82	3,85	1,06	**0,02**	2,70
Instrumental	2,86	0,89	3,37	0,81	0,19	1,30
Composite	3,24	0,55	3,99	0,86	**0,03**	2,25

Note: participants indicated experienced somatic symptoms on 5-point Likert scale [1 – never/hardly ever; 2 – seldom; 3 – often, 4 – very often 5 – always/nearly always]. Mean result shows frequency.

Statistically significant relationships were found in study variables. Social support and specifically all types of support (appraisal, informative, emotional and instrumental) were negatively related to perceived symptoms of depression, the level of school stress, somatization symptoms and risk behaviors. This shows that the higher was the teacher's help, the lower were psychological costs of being at school. Regression analysis showed however that out of four factors introduced to the model as explanatory variables (somatization symptoms, risk behaviors, social support, school stress) only the level of school stress contributed to the depression symptoms perception reported by young people who participated in the study. The results of r-Pearson correlates and regression analysis are shown in Table 7.

Table 7. The r-Pearson correlation coefficients between study variables.

	Social Support	Risk behaviors	Somatization	Depression symptoms	School stress
Social support	1	-	-	-	-
Risk behaviours	-0,36	1	-	-	-
Somatization symptoms	-0,43	0,60	1	-	-
Depression symptoms	-0,44	0,56	0,74	1	-
School stress	-0,36	0,47	0,71	0,75	1

F = 9,34 (4,42); p,0,001; r= 0.67

Note: All correlations are statistically relevant at p<0,05 and p<0,001.

7. DISCUSSION

The main aim of the study was to compare two school microsystems in terms of the level of depression symptoms, somatization symptoms and risk behaviors. We also wanted to find out if the high outcomes students were more stressed with school demands and to define the role of social support provided by teachers. Of particular interest to study was to find out if these two groups of adolescents constitute two different mental contexts which demand specific approach. This knowledge would be of high practical value for the school psychologists, parents, caregivers and psychiatry specialists.

While preparing the study questions it was expected that the perception of depression symptoms, the number of risk behaviors, somatization symptoms and the level of school stress would be different in the two study samples. We expected to find higher costs of coping with school and personal demands in students attending the low outcomes division as they fail at school in terms of marks, test results and trial exams scores. Furthermore, we assumed that the students of the high outcomes divisions would report higher level of school stress and teachers support than pupils of low outcomes class due to pressure of achieving great marks and test results. Expecting higher levels of teachers' support was set on the assumption that the high outcomes students are praised more often, and they also meet teachers' expectations more accurately than the low outcomes students (Leis 2021, 39-40).

The results of the study indicate medium level of depression symptoms in the whole group which is consistent with the previous studies. However, we found much higher results in girls who attend low outcomes division. Their mean result is above 19 points which according

to the tool's author Maria Covacs calls for closer attention. They bear more mental costs and that their everyday functioning (i.e. cognitive, emotional, motivational, somatic, social) at school is burdened by the symptoms which they developed.

The individual condition of the adolescents may be a response to their internal feelings and social transactions. Thus, it is not possible to point out the cause of the girls' differences in depression symptoms' perception. We can only assume that they suffer from the fact that they fail at school and perhaps worry about their future. This group (i.e. the low outcomes girls) has also higher level of somatic symptoms: abdominal pain and headache, as well as sleepiness, tiredness and the feeling of overwhelming boredom when in class. This is partly in line with girls' stressor indicated as often experienced: 'I fear that the teacher will check my knowledge' and 'I worry about my final exam result.' Being exposed to the situation when the teacher ask the questions which one is not able to answer is stressful itself and this might also result in receiving a low mark. The girls can be afraid of school failure consequences at home since they declared another stressor as burdening i.e. 'my parent/s will be mad at me for my grades.' Again, we can only assume that the parents influence girls' feelings. Previous studies have shown that home context which is not warm, friendly and supporting may rise depression symptoms and school somatization (Marici et al. 2023).

There is important conclusion which can be drawn from the analysis of the somatic symptoms – the shift from *pain* to *boredom*. Studies that were conducted amongst adolescents just a decade ago had shown that the students had been declaring high level of various pains of mental origin (Sikora 2019, 89). They often felt abdominal pain or a headache when confronted with school demands. However, with a growing consciousness of teachers and the policies of local medical services which focus on protecting children's mental health there are chances for a cultural change. Students seem to stop worrying or feeling frightened at school (there will always be some exceptions). Instead, they feel tired and bored.

In the study the level of school stress was lower than expected. Participants declared that they are 'rarely' stressed at school and only two stressors were declared as 'often' fearsome. The first stressor referred to the situation of being checked by the teacher on the present knowledge and the second to being worried about the final exam result. The first difficulty

might be stressful as it puts the individual in the necessity of answering a potentially difficult question which is usual demand at school. The second stressor relates to the adolescents' future education. The final exam result has a considerable influence on the possibility to get to the 'top' secondary schools. However, what can be found as more interesting is the fact that the school demands– in the view of the results – are now less stressful as they were several years ago (Sikora 2010, 45).

Quite contrary to the study assumptions, no differences in stress level between divisions were found. It was expected that the pupils focused on achieving good and excellent grades will perceive more school stressors than students from the low outcome division. The result was contrary to those expectations. While looking close at the participants' declarations only one concern differentiated divisions. Students from the low outcomes division were more stressed with their parents' reaction to a bad mark than students from the high outcomes division. There are various possibilities causing this condition. Some parents may work hard and have little time to supervise the kids, while other parents are just concerned about their children's well-being and do not overreact over the school issues. It is also possible that some caregivers do care about school promotion and consequently of the future of their children. Some children may want to protect their parents and do not reveal their critical approach while others are overwhelmed by their parents' expectations.

Risk behaviors which were declared in a present study are a different from those reported in previous studies (Bai et al. 2018, 1009). Instead of drinking beer or wine, consuming energy drinks was declared as the most frequent behavior that risks one's personal health. Chatting with an unknown person on the internet and staying out late are declared as the next frequent. Previous research has shown that low school results relate to smoking, drinking alcohol, skipping school and other behaviors that put early adolescents at risk of dropping out. In the present study 52% of low outcomes students declared smoking e-cigarettes comparing to 32% of high outcomes students. No other behaviors connected with law breaking, school skipping or aggression at school were reported. The rationale which stands behind the students declarations may be connected with the age of adolescents. More serious risk behaviors usually appear in mid and late adolescence.

It is also worth to note that there is a relationship between the level of depression symptoms and risk behaviors in the study. This may indicate comorbidity of depression and risk undertaking in early stage of adolescence. In fact, risk behaviors precede depression symptoms, as reported in previous research (Sikora 2016, 175).

The participants experienced teachers' social support differently. The low outcomes students reported significantly more support than the high outcomes students. Especially they felt being praised, treated fairly, provided with time and necessary explanations more often than students who received high marks at school. This was not expected as usually students who have poor academic performances do not want to engage in classroom activities, they have low motivation to work and demand a patient attitude of teachers. Additional explanations made by class tutors may enlighten the result. Adolescents who perform very well at school are demanding, they expect that teachers will make their aims easier and that they will treat their needs individually and with great attention. Young students of the low outcomes divisions were characterized as shy, quiet and withdrawing. Social support perception might then depend on individual claims and perhaps this is one of the possible explanations of the study results.

Boys of the low outcome division reported the highest levels of support provided by teachers. There was a difference between their perception of received support and the perception of boys of high outcome division. No difference was found in-between girls groups. Female participants who receive low marks at school did not see the help of teachers as their male classmates of the same division. Some studies report that the female teachers treat boys with greater attention than girls and this may contribute to the difference (Sadker and Sadker 1995, 289). However, we must keep in mind that the low outcome girls had a calling level of depression symptoms which may blur the amount and quality of the support provided. This can be called 'an invisible support.' The suffering person is just unable to recognize the help which is offered.

The conclusions of the study are as follows:

1) the most vulnerable to depression symptoms were the girls who receive low marks and attend low outcomes division,

2) risk behaviors – other than in the later stages of development – related to depression symptoms. The more behaviors participants declared the higher level of depression symptoms they reported,
3) 13-14 y/o people are not stressed at school, they are rather bored, tired and sleepy as none of the typical pains, aches or discomforts were declared as 'often' or 'nearly always/always' experienced,
4) the support which is available at school is negatively related to depression symptoms, risk behaviors, somatization and perceiving school stress. The more support adolescents receive the better their mental and somatic condition is,
5) although reported as not burdensome by participants, school stressors contribute to the depression symptoms of 13-14-year-old adolescents.

The study findings may help adult caregivers, school psychologists and psychiatrists who work with adolescents to understand the nature of their problems and possible links to the context features that contribute to mental health or its lack in 13–14-year-old adolescents.

As the study group was not numerous, larger samples are needed to confirm the results obtained in the study.

Funding: This research received no external funding.
Institutional Review Board Statement: Not applicable.
Conflicts of Interest: The author declares no conflict of interest.

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