The Possibility for a Teacher to Reduce a Sense of Helplessness in Polish Language and Maths Lessons in the Fifth Year of Learning in Primary School

Abstract
The article presents the results of empirical research, conducted according to quantitative strategy, on the significance for the level of school helplessness of the conditions of psychosocial development created for pupils in their fifth year of learning in primary school in relationships with teachers and peers and in relation to the grades received in Polish language and math classes throughout the school year. The regression analysis indicated that relationships with teachers exert the stronger impact on the level of helplessness, followed by school grades, and relationships with peers. The teacher can influence each of these factors. This means that the chances that pupils have of fulfilling the developmental task for the age of 7 to 12, in accordance with Erik H. Erikson’s stages of psychosocial development, are largely dependent on the teacher. Not only the successes in subsequent life stages but also the motivation to learn, creativity, flexibility of thinking and acting, persistence, and the emotions accompanying pupils while learning are dependent on a sense of competence. The care and attention of teachers given to ensure that every pupil can develop their com-

1 Department of Custodial Pedagogy and Social Prevention, Kazimierz Wielki University, Poland.
E-MAIL: deptula.maria1@gmail.com ORCID: 0000-0003-3888-7623

2 Department of Custodial Pedagogy and Social Prevention, Faculty of Education, Kazimierz Wielki University, Poland.
E-MAIL: sz.borsich@gmail.com ORCID: 0000-0001-9635-7087

The results of research presented hereunder are part of the project titled: “Niebieskoocy” w naszej szkole – przewyższenie stereotypów drogą do tworzenia uczniom lepszych warunków rozwoju w klascie szkolnej [The “Blue Eyed” in Our School – Overcoming Stereotypes as the Pathway to Creating Better Conditions for Pupil Development in the School Class] co-financed by the State Agency for the Prevention of Alcohol-Related Problems within the National Health Programme for 2016-2020 (Task No. 6/53/3.4.3/17/DEA, Agreement with the Kazimierz Wielki University).
petences and sense of agency according to their potential is in the interests of pupils, teachers, and society alike.

**Keywords:** relationships with teachers, middle school age, sense of competence, relationships with peers, school helplessness, school grades.

**INTRODUCTION**

The aim of this article is to present one of the ways of creating conditions for pupils of middle school age that are conducive to their psychosocial development in school. Błażej Smykowski (2003), recalling that learning is the most important form of human activity, points out the particular importance of the school age (7–12/13 years old). Asides from spontaneous, incidental learning that dominates earlier life stages, a child becomes capable of learning under the guidance of a teacher and, towards the end of this stage, self-guided learning.

Coping with the demands of school related to the curriculum being implemented therein and satisfactory relationships with teachers and peers all contribute to the development of a sense of competence. It constitutes the positive end of the continuum on which the resolution of the developmental crisis at that particular time can be described according to the concept of the stages of psychosocial development of Erik H. Erikson. Its negative end constitutes a sense of inferiority arising from not adjusting the developmental conditions and requirements to the needs and capabilities of the child (Erikson, 1997; Brzezińska, Appelt, & Ziółkowska, 2016). A positive resolution of the crisis, which is important for further development of an individual in the social world, means the shaping of a new ego strength, referred to as competence; in other words, the “casual experience of agency, skills and abilities, and intelligence in the fulfilment of tasks, uninterrupted by an infantile inferiority towards persons purportedly more competent” (Brzezińska et al., 2016, p. 207).

Thus, within compulsory school which is the main place of learning under the guidance of a teacher, every child should have conditions that are conducive to the development of their sense of competence. This not only pertains to a certain field.

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where the child, harnessing their resources and capabilities, can achieve success. It is imperative that every pupil builds their sense of competence in fulfilling the tasks that have been set to them in lessons of subjects that are considered key for further education. These subjects include the native language and maths. The authors of this article do not claim that other subjects are of no significance but they do believe that permanent doubt in the ability to meet the demands set by teachers in these subjects will cause a drop in the motivation to learn and in resilience in overcoming difficulties and, in consequence, will lead to the emergence of learned helplessness.

The phenomenon of learned helplessness was described by Martin E.P. Seligman (1993, 1997) as giving up and failing to act as a result of experiencing a series of failures that leads to doubt in the fact that goals can be achieved. Wiesław Łukaszewski (2003, p. 249) characterises this as a “loss of control over the relationship between one’s own activity and its consequences”. Although initially an individual tries to regain control, they give up their efforts after finding that they cannot achieve their goal, thereby becoming submissive and passive. In Seligman’s concept, the phenomenon of helplessness can be explained by indicating three types of deficits: cognitive, emotional, and motivational. A cognitive deficit is expressed in a drop in the ability to receive and process information due to reduced concentration capacity and worse memory. The expectation of failure in new task situations also arises, which makes it more difficult for the individual to make a realistic evaluation of the relationship between their own behaviour and the accurate completion of a task. Emotional deficit, or rather – according to Wiesław Łukaszewski (2003, p. 249) – “a change in the modality of emotions”, consists of the disappearance of positive emotions and the dominance of negative emotions, but only the passive ones of sadness and depression. Barbara Ciżkowicz (2009) also draws attention to anxiety, a sense of threat and helplessness, and a lack of hope leading to apathy. Apathy or very weak motivation, resignation from controlling events, are traits referred to as motivational deficits (Łukaszewski, 2003; Ciżkowicz, 2009).

Seligman (1997) explains that learned helplessness emerges from a pessimistic style of explaining the causes of own failures and successes by an individual, but also presents the methodology of teaching children the optimistic style of interpreting these events. According to the authors of this article, such actions may bolster a child’s motivation to become more involved in learning. However, without changing the conditions for development that are created for them in school by teachers and peers, one can hardly count on any permanent improvement in the learning results of children. Mirosław Kofta and Grzegorz Sędek demonstrate that it is precisely the “long-term and futile involvement of the mind in creating action programmes that is the primary source of learned helplessness” leading to cognitive exhaustion (Sędek...
& Kofta, 1990; and Kofta & Sędek, 1993, as cited in: Łukaszewski, 2003, p. 250). Bogdan Wojciszke (2013, p. 57), when discussing this concept, characterises the state of cognitive exhaustion as a “sense that we do not understand and will never understand what is happening”. The further description of this state presented by Wojciszke accurately reflects the experiences of many pupils and teachers. Pupils say that: their head is empty; that they do not even want to try tackling a task; and that they do not understand what is happening in lessons. An accusation that frequently came up in the conversations held by the authors of this article with school teachers was that the pupil “knows nothing” and that they do not even pay attention in class. Good students who want to get even better results attend extracurricular lessons, which are, in turn, avoided by weaker pupils. The concept of Kofta and Sędek helps us understand that not even a series of failures in actions (loss of behavioural control) is required for helplessness to arise, which is accompanied by strong and unpleasant emotions. All that is required for it to occur is “just not understanding what is happening” (Wojciszke, 2013, p. 58), and the cognitive exhaustion resulting from this state is sufficient reason for unpleasant emotions to arise.

If teachers were aware of this mechanism, perhaps they would not be surprised that a pupil with a low level of knowledge and skills, instead of listening attentively in class, disrupts its course by making comments or behaving in a manner that is contrary to the norms and standards applicable in class. Perhaps they would then understand that this is how they cope with the escalating unpleasant emotions, and openly reprimanding them only raises the level of this distressing tension in them. Giving another negative grade will be equally ineffective; it will not motivate the pupil to learn or improve their behaviour if they are experiencing school helplessness. Many pupils attempt to fulfil the demands and requirements of teachers but success is achieved mainly by those for whom the tasks set at school are within their zone of closest development and for whom teacher support is adequate to their potential (Cole, 1995; Smykowski, 2012, 2015; Wood, 2006).

Unfortunately, the results of research on a large (N = 750) random representative sample for pupils in their fourth, fifth, and sixth year of learning attending schools in a city with a population of approximately 365,000 inhabitants (Deptuła, 2019) indicate that this condition is often left unmet in schools. A sense of helplessness in Polish language classes was higher in the fifth year of learning than in the fourth year and more elevated in the sixth year compared to the fourth year of school. In maths lessons, the sense of helplessness systematically increased – the lowest was recorded in the fourth year, being higher still in the fifth year, and the highest of all in the sixth year of school. The differences between the mean values obtained on the school helplessness scale in the case of both school subjects were statistically sig-
The Possibility for a Teacher to Reduce a Sense of Helplessness

An analysis of the mean values on the subscales measuring specific deficits indicates that despite the differences between pupils in the fourth and sixth year of learning in the scope of each deficit being statistically significant, the biggest difference occurs in the scope of motivation. Pupils attending school for longer expressed that they are bored in class more often than pupils who had not attended school that long, who have a sense of lost time and daydream in class.

The picture obtained from the cross-sectional research supplements the findings of longitudinal studies of pupils in their fourth and fifth school year in relation to school grades obtained in Polish language and maths classes. They indicate that children from families with a low socioeconomic status (SES) are particularly vulnerable to developing a sense of helplessness. This is because they have far smaller chances of getting good and very good grades in these subjects at the end of the school year than pupils with an average and high SES (Borsich & Deptuła, 2020).

Evidently, a positive resolution of a life task and building new ego strength—competences—may be unattainable for a certain group of pupils, and this risk increases in subsequent school years. However, it is not the point for the pupils to never feel helpless or always get good and very good grades. Neither the “achievement of the positive extreme of the pole or turning towards the negative extreme of the pole” are beneficial to development. A positive resolution of a normative crisis consists of achieving an equilibrium between the pole opposites (Brzezińska et al., 2016, p. 208).

This is why the authors of this article sought factors reducing the risk of a growing school helplessness that can be influenced by the teacher. They analysed the significance of the conditions for psychosocial development that are created for each pupil by teachers and peers, as well as the school grades received throughout the school year in Polish language and maths classes.

The significance of the teacher–pupil relationship in the context of school helplessness is evident. It is the teacher who decides on the content of each lesson and its course, and who gives out tasks and assesses their performance. However, the role of peers in counteracting school helplessness is justified by the results of research on the relationship between peer acceptance or rejection and classroom participation. Gary W. Ladd, Sarah L. Herald-Brown and Mark Reiser (2008), in longitudinal studies carried out on respondents aged 5 to 12 years, revealed three groups of pupils who were chronically rejected. The first, called early rejection, was created for children who were rejected for the first three or four years in the period encompassed by the study and not longer than one year later. The second, described as late chronic rejection, included children rejected for two or three years between the third and the sixth year of learning, and for not longer than one year earlier. The third group
– children *constantly chronically rejected* – constituted respondents rejected for five years over a seven year period of the study. The remaining respondents, depending on whether they experienced rejection or not, were included in the group of ‘*rejected for one year*’, ‘*sporadically rejected*’, and ‘*never rejected*’.

A comparison of the trajectory on acceptance (decreasing, increasing, constantly high, and constantly low) with the trajectory on ‘*self-guided learning*’ and ‘*cooperation with the teacher*’ revealed statistically significant differences for both dimensions between children ‘*chronically rejected*’ and children ‘*never rejected*’, ‘*rejected for one year*’, or ‘*sporadically*’. Children who did not experience rejection and those who were rejected for one year or sporadically, guided their own learning process more often with each subsequent year. In the ‘cooperation with the teacher’ dimension, high and stable results across all measurements were recorded in these groups of children (Ladd et al., 2008). The observation of changes taking place in groups of children ‘*chronically rejected earlier*’ and ‘*later chronically rejected*’ pre-judges the significance of peer rejection for the success of a child in the fulfilment of school tasks. Among the ‘*earlier chronically rejected*’ respondents, an increase in both the measured dimensions concerning their behaviour in class was observed when they gained the acceptance of their peers. In children ‘*later chronically rejected*’, first a systematic increase in self-guided learning and a high willingness to cooperate with the teacher were observed, as was the case among pupils who were never rejected or experienced rejection for a short period or sporadically. From the time of rejection, the results in both dimensions dropped significantly. The authors explained the observed dependencies among others by the fact that the experience of rejection, eliciting unpleasant emotions, disrupts or changes the brain functions that are important in learning and memory processes (Ladd et al., 2008). The feeling of loneliness and lack of support that is provided to the accepted children by the group also have a destructive impact on health, not only psychological, but also on the activity of children rejected at school (Sentse et al., 2010). It should be noted that the SES of the families of pupils experiencing ‘*early chronic rejection*’ and ‘*constant chronic rejection*’ was significantly lower than among accepted pupils in the studies by Ladd et al. (2008). It is also known that many other risk factors for school failure apply to children with a low SES (Jensen, 2013). Some of them can neutralise good relationships with peers (Deptula, 2013).

The method and results of searching for an answer to the question are presented below: What is the significance of the psychosocial development conditions created for students in the fifth year of primary school in relations with teachers and peers, as well as school grades obtained throughout the school year in the subjects of mother tongue and mathematics, for the sense of school helplessness?
METHOD

The conditions for psychosocial development in relationships with teachers and peers were defined as a subjective representation of the objective processes taking place in the interactions between the pupil and their teacher and peers, leading to the shaping of a system of beliefs about the experienced and predicted behaviour of teachers and peers in relation to the respondent in typical school situations (cf. Brzezińska, 2000; Bańka, 2002; Kulesza, 2007). Two scales elaborated by Maria Deptuła were used to measure them.

The scale measuring the conditions of psychosocial development in peer relationships comprises 21 items with five response options to choose from, ranging from ‘nobody’ to ‘almost everybody’, with a point system from 0 to 4. An example of a question: What do you think, how many friends of yours from class would miss you if you were absent from school for longer, for more than two weeks, for example? The scale measuring the conditions for development in relationships with teachers was created using 29 items. An example of a question: How many teachers would help you if someone was bullying you at school? The response options ranged from ‘none of the teachers’ (0 points) do to ‘all of the teachers’ (4 points). In both scales, the higher the result, the better the conditions for development.

The sense of helplessness was measured using the School Helplessness Scale (Ciżkowicz, 2009). The variable was defined, after its author, as the “incapacity to fulfil own needs through own behaviour” in the objective aspect or the person’s perception of there being no relationship between their behaviour and its expected consequences (p. 12). The scale comprises 20 identical statements for Polish language and maths. Three of them (12, 15, and 18), after the pilot studies, were rephrased in order to adapt them to the study of children of middle school age. An example of a statement: I’m terribly bored; I’m afraid to speak up. Just as in the scales presented above, the respondents had to choose one of five responses ranging from ‘never’ (0 points) to ‘always’ (4 points). The scale was construed so that the higher the result, the higher the sense of helplessness, which means a smaller chance of success in school and the development of a sense of competence by a pupil.

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4 The introductory phrase to a given group of questions entailed a request for the pupil to take into account all the teachers with whom they have classes in the school year in which the study was carried out.

5 A description of the modifications implemented with the permission of the Author of the Scale (Deptuła, 2019). For the original statements, see: Ciżkowicz (2009, p. 231).
Table 1. Reliability of the Scales Used in the Studies

| Scales                                           | N   | Cronbach’s alpha | M. corr. |
|--------------------------------------------------|-----|------------------|----------|
| Conditions for psychosocial development in       | 281 | 0.935            | 0.42     |
| relationships with peers [RP]                    |     |                  |          |
| Conditions for psychosocial development in       | 281 | 0.933            | 0.34     |
| relationships with teachers [RT]                 |     |                  |          |
| Sense of helplessness in Polish language classes | 279 | 0.925            | 0.39     |
| [HP]                                             |     |                  |          |
| Sense of helplessness in maths classes [HM]      | 279 | 0.901            | 0.33     |

Key: M. corr. – mean correlation between scale items.
Source: Authors’ own study.

**RESPONDENTS**

The respondents were pupils in their fifth year of school from 17 branches randomly selected from all generally accessible classes in the 2017/2018 school year in the state primary schools in Bydgoszcz, Poland. The participation of the child in the study required the written consent of the parent or legal guardian to be obtained.\(^6\)

**RESULTS**

The descriptive statistics of the studied variables have been presented in Table 2. They contain data concerning the primary variables (conditions for development in relationships with peers, conditions for development in relationships with teachers, and a sense of helplessness in Polish language lessons and maths) and variables additionally created (general sense of helplessness and mean partial grades received by the pupil throughout the school year covering both main school subjects). The creation of a dependent variable called ‘general helplessness’ justifies the fact that scientists studying the phenomenon of helplessness like, for instance, Lyn Y. Abramson, Martin E. Seligman, and John D. Teasdale (1978, as cited in: Försterling, 2005, p. 135) distinguish specific and global helplessness. The fact

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\(^6\) A mobile diagnostic lab was used in the studies, comprising tablet computers and a router. The pupils completed an online Google Forms survey during lessons, in the presence of a member of the research team. The respondents were given a personal 7 digit code to log into to ensure the anonymity of the respondents and the possibility of the researchers combining the responses from three questionnaires completed during three lessons.
that the sense of helplessness correlation coefficient for both subjects amounted to \( r = 0.47; p < 0.001 \) justifies the creation of the ‘general sense of helplessness’ variable showing an average level of a sense of helplessness in lessons of both these subjects.

The normality of distribution was checked using the Kolmogorov-Smirnov test with Lilliefors significance correction, also taking into account the skewness and kurtosis values. They did not exceed the range [-1; 1] for any of the variables; thus, it can be concluded that all distributions of variables were close to normal distribution. The descriptive statistics of the studied variables have been presented in Table 2.

### Table 2. Descriptive Statistics for the Studied Variables

| Variable                          | N  | M  | Std. dev. | Min. | Lower | Median | Upper | Max. | Skewness | Kurtosis |
|-----------------------------------|----|----|-----------|------|-------|--------|-------|------|----------|----------|
| Relationships with peers          | 281| 2.35| 0.69      | 0.19 | 1.95  | 2.43   | 2.86  | 4.00 | -0.59    | 0.06     |
|                                   |    |     |           |      |       |        |       |      |          |          |
|                                   |    |     |           |      |       |        |       |      |          |          |
| Relationships with teachers       | 281| 2.56| 0.61      | 0.48 | 2.21  | 2.62   | 3.00  | 3.83 | -0.52    | 0.13     |
|                                   |    |     |           |      |       |        |       |      |          |          |
|                                   |    |     |           |      |       |        |       |      |          |          |
| Helplessness at Polish language classes | 279| 1.41| 0.73      | 0.00 | 0.85  | 1.30   | 1.90  | 3.45 | 0.43     | -0.30    |
|                                   |    |     |           |      |       |        |       |      |          |          |
|                                   |    |     |           |      |       |        |       |      |          |          |
| Helplessness at maths lessons     | 279| 1.40| 0.64      | 0.00 | 0.95  | 1.35   | 1.80  | 3.20 | 0.26     | -0.30    |
|                                   |    |     |           |      |       |        |       |      |          |          |
|                                   |    |     |           |      |       |        |       |      |          |          |
| General helplessness              | 279| 1.40| 0.59      | 0.08 | 0.98  | 1.40   | 1.80  | 2.85 | 0.16     | -0.31    |
|                                   |    |     |           |      |       |        |       |      |          |          |
|                                   |    |     |           |      |       |        |       |      |          |          |
| Polish language grades            | 281| 3.76| 0.89      | 1.36 | 3.24  | 3.79   | 4.48  | 5.61 | -0.33    | -0.40    |
|                                   |    |     |           |      |       |        |       |      |          |          |
|                                   |    |     |           |      |       |        |       |      |          |          |
| Maths grades                      | 281| 3.47| 0.97      | 1.31 | 2.73  | 3.52   | 4.19  | 5.50 | -0.16    | -0.75    |
|                                   |    |     |           |      |       |        |       |      |          |          |
|                                   |    |     |           |      |       |        |       |      |          |          |
| Overall grades                    | 281| 3.61| 0.88      | 1.39 | 3.02  | 3.67   | 4.30  | 5.46 | -0.20    | -0.66    |

*Source: Authors’ own study.*
RELATIONS WITH PEERS AND A SENSE OF HELPLESSNESS

The first question to which answers were sought was: How do peer relationships (as a risk factor or a protective factor) differentiate the general (concerning the two main school subjects) sense of helplessness of pupils towards the end of the fifth year of learning in primary school? Using the lower and upper quartile values, the thresholds determining very bad relationships with peers (risk factor) and very good relationships with peers (protective factor) were set. Analysis of variance was carried out for the analysis of differences. First, the numbers in specific subgroups were aligned and the assumption of the uniformity of variance was checked. A statistically insignificant result for Levene’s test: $F(2.195) = 0.66; p > 0.05$ enabled the analysis to be carried out. The statistics concerning the specific groups have been presented in Table 3.

Table 3. Group Statistics for the Variables ‘Relationships with Peers’ and ‘General Sense of Helplessness’

| Factor level – Relationships with peers | N  | M   | SD  | St. Err. | -95.00% | +95.00% |
|----------------------------------------|----|-----|-----|----------|---------|---------|
| Gr. Risk factor                        | 64 | 1.69| 0.60| 0.07     | 1.54    | 1.84    |
| Gr. Mean                               | 66 | 1.40| 0.51| 0.06     | 1.27    | 1.52    |
| Gr. Protective factor                  | 68 | 1.15| 0.56| 0.07     | 1.02    | 1.29    |

Source: Authors’ own study.

As a result of the carried out analysis (see Table 4), a statistically significant main effect for the relationships with peers factor $F(2, 195) = 15.7; p < 0.001; \eta^2_{\text{partial}} = 0.14$ was revealed.

Table 4. Results of One-Factor Analysis of Variance (ANOVA) for the ‘Relationships with Peers’ and the ‘General Sense of Helplessness’ Variables

|                  | SS   | Degrees of freedom | MS     | $F$     | $p$       |
|------------------|------|--------------------|--------|---------|-----------|
| Absolute term    | 394.89 | 1                   | 394.89 | 1280.84 | 0.000000  |
| Relationships with peers | 9.68   | 2                   | 4.84   | 15.70   | 0.000000  |
| Error            | 60.12 | 195                 | 0.31   |         |           |

Source: Authors’ own study.

Post hoc analysis using the Tukey test was carried out to determine the significance of this effect. The results have been presented in Table 5.
The analysis demonstrated that there are statistically significant differences between all groups. The highest general sense of helplessness occurred in the group of children who have the worst relationships with their peers (risk factor), and the lowest in the group with very good relationships with peers (protective factor).

**RELATIONSHIPS WITH TEACHERS AND A SENSE OF HELPLESSNESS**

The second question was phrased as follows: How do relationships with teachers (as a risk factor or a protective factor) differentiate the general (concerning the two main school subjects) sense of helplessness of pupils towards the end of the fifth year of learning in primary school? The analyses were carried out in the same way. A statistically insignificant result for Levene’s test: $F(2, 210) = 0.92; p > 0.05$ also in this case allowed the ANOVA test to be used. The statistics concerning the specific groups have been presented in Table 6.

As a result of the carried out analysis (see Table 7), a statistically significant main effect for the relationships with teachers factor $F(2, 210) = 28.96; p < 0.001$; $\eta^2_{\text{partial}} = 0.22$ was revealed.
Table 7. Results of One-Factor Analysis of Variance (ANOVA) for the ‘Relationships with Teachers’ and the ‘General Sense of Helplessness’ Variables

|                        | SS     | Degrees of freedom | MS   | F       | p        |
|------------------------|--------|--------------------|------|---------|----------|
| Absolute term          | 433.91 | 1.0                | 433.91| 1460.19 | 0.000000 |
| Relationships with teachers | 17.21  | 2.0                | 8.60 | 28.96   | 0.000000 |
| Error                  | 62.40  | 210.0              | 0.30 |         |          |

Source: Authors’ own study.

The significance of this effect was revealed by post hoc analysis using the Tukey test (Table 8).

Table 8. Post Hoc Analysis – Tukey Test

| Relationships with teachers | [1] | [2] | [3] |
|-----------------------------|-----|-----|-----|
|                             | 1.757 | 1.465 | 1.062 |
| 1 Gr. Protective factor     | 0.004497 | 0.000422 | 0.000045 |
| 2 Gr. Mean                  | 0.004497 | 0.000422 | 0.000045 |
| 3 Gr. Protective factor     | 0.000022 | 0.000045 | 0.000045 |

Source: Authors’ own study.

As can be observed, there were statistically significant differences between all groups. The highest general sense of helplessness was in the group of children who have the worst relationships with their teachers (risk factor), and the lowest in the group with very good relationships with teachers (protective factor).

School Grades and a Sense of Helplessness

The third question was: How do the grades from the two main school subjects (as a risk factor or a protective factor) differentiate the general (concerning both subjects) sense of helplessness of pupils towards the end of the fifth year of learning in primary school? In this case, an additional variable was created based on the primary variables (Polish language and maths grades), determining the mean of all the partial grades obtained in both subjects. The thresholds determining the risk factor and the protective factor were set on the basis of the lower and upper quartile. The result of Levene’s test: $F(2, 190) = 0.61; p > 0.05$ confirmed the uniformity of variance in the identified subgroups, which allowed ANOVA to be carried out. The statistics concerning the specific groups have been presented in Table 9.
Table 9. Group Statistics for the ‘Grade Point Average in Polish Language and Maths’ and the ‘General Sense of Helplessness’ Variables

| Risk level – Grade point average | N   | M    | SD  | St. Err. | -95.00% | +95.00% |
|----------------------------------|-----|------|-----|----------|---------|---------|
| Gr. Protective factor            | 64  | 1.68 | 0.61| 0.08     | 1.53    | 1.84    |
| Gr. Mean                         | 60  | 1.35 | 0.55| 0.07     | 1.21    | 1.49    |
| Gr. Protective factor            | 69  | 1.18 | 0.55| 0.07     | 1.05    | 1.31    |

Source: Authors’ own study.

As a result of the carried out analysis (Table 10), a statistically significant main factor effect for the school grades in the main subjects $F(2, 190) = 13.21; p < 0.001; \eta^2_{\text{partial}} = 0.12$ was revealed.

Table 10. Results of One-Factor Analysis of Variance (ANOVA) for the ‘Grade Point Average in Polish Language and Maths’ and the ‘General Sense of Helplessness’ Variables

|                         | SS       | Degrees of freedom | MS       | F      | p      |
|-------------------------|----------|--------------------|----------|--------|--------|
| Absolute term           | 380.06   | 1                  | 380.06   | 1162.23| 0.000000 |
| GRADE RISK              | 8.64     | 2                  | 4.32     | 13.21  | 0.000004 |
| Error                   | 62.13    | 190                | 0.33     |        |        |

Source: Authors’ own study.

The significance for this effect was determined using post hoc analysis with the Tukey test (Table 11).

Table 11. Post Hoc Analysis – Tukey Test

| Grades in the two subjects | {1} | {2}   | {3}  |
|----------------------------|-----|-------|------|
| 1  Gr. Protective factor   | 1.685| 0.003321| 0.000023|
| 2  Gr. Mean                | 1.351| 0.003321| 0.212520|
| 3  Gr. Protective factor   | 1.181| 0.000023| 0.212520|

Source: Authors’ own study.

It was determined that there were statistically significant differences between the first (risk factor) and the second and third group (protective factor). The group of children with the lowest grades had a higher sense of helplessness, whereas the differences between the second and third group were not statistically significant.
THE VARIABLES THAT WERE INFLUENCED BY THE TEACHER AND THE SENSE OF HELPLESSNESS OF CHILDREN

The last research question concerned the predictive role of variables that were affected by the teacher in relation to the sense of helplessness of children. In other words, whether, when fostering good relationships with peers, own relationships with the pupil and positive grades (e.g., assessing not only the effects of learning but also the learning progress), the teacher has the possibility of limiting the feelings of helplessness of pupils. In order to obtain an answer to a question phrased in this way, regression functions were used. The linearity of the relationships was checked not only on the basis of the correlation coefficients, but also on distribution charts. Before the analysis was carried out, 10 of the most outlying cases were removed.

Table 12. Correlation Matrix for the Studied Variables

|                  | 1   | 2       | 3       | 4       |
|------------------|-----|---------|---------|---------|
| 1. Relationships with peers |     |         |         |         |
| 2. Relationships with teachers | 0.38*** |         |         |         |
| 3. Grades in the two subjects | 0.18** | 0.10    |         |         |
| 4. Feelings of helplessness in both subjects | -0.40*** | -0.55*** | -0.34*** |         |

Source: Authors‘ own study.

In order to estimate the parameters of the regression line, the method of smallest squares was selected. The proposed multiple regression model turned out to be statistically significant $F(3, 257) = 60.56; p < 0.001$ (Table 13).

Table 13. Results of Multiple Regression Model Testing

|                  | b*  | St. Err. b* | b      | St. Err. b | t(257) | p       |
|------------------|-----|-------------|--------|------------|--------|---------|
| Ab. term         | 3.45| 0.16        | -3.52  | 0.000      |
| Relationships with peers | -0.18 | 0.05    | -0.15  | 0.04       | -3.52  | 0.000   |
| Relationships with teachers | -0.45 | 0.05    | -0.42  | 0.05       | -8.75  | 0.000   |
| Grades           | -0.27| 0.05       | -0.17  | 0.03       | -5.51  | 0.000   |

$R = 0.64; R^2 = 0.41$ Adj. $R^2 = 0.41 F(3, 257) = 60.56; p < 0.001$ St. Err. of est.: 0.43

Source: Authors‘ own study.
When building the regression model, we wanted to use the smallest number of predictors to explain the highest percentage of variance (Bedyńska & Książek, 2012, p. 50). The proposed model explains over 40% of the variability of the dependent variable. Therefore, the variables on which the teacher has an influence can, to a large extent, limit the feelings of helplessness of pupils (negative dependency – the better the relationships with peers and with teachers and the grades obtained, the lower the sense of helplessness). After estimating the model parameters, a procedure checking the model assumptions was carried out ex post. The normality graph of the residuals showed no deviation. The assumption concerning the constancy of the variance of the random component (homoscedasticity) was also checked. The distribution plot of the residuals in relation to the predicted values did not reveal the residual distribution to be different over the predictor space. There were correlations between two of the three predictors, which is why the partial correlation coefficients and semi-partial correlations were also presented in Table 14, which allow the unique impact of one predictor to be determined while controlling the remainder.

### Table 14. Partial and Semi-Partial Correlations

|                        | Partial correlation | Semi-partial correlation |
|------------------------|---------------------|--------------------------|
| Relationships with peers | -0.21               | -0.17                    |
| Relationships with teachers | -0.48             | -0.42                    |
| Grades                | -0.32               | -0.26                    |

Source: Authors’ own study.

As can be seen, relationships with teachers, then grades and, following that, relationships with peers had the strongest impact on a sense of helplessness. It should be noted that the scale to measure the conditions of psychosocial development in relationships with teachers refers to all the teachers teaching the studied pupils in the given school year and not just teachers of Polish language and maths. It is likely that the results concerning the relationships only with these teachers would be even more significant for a sense of helplessness than those presented herein.

**CONCLUSION**

The results presented in this article are consistent with the results of previous research showing that changing the conditions created for a student in the class-
room leads to changes in his functioning at school. Reducing stress and increasing support as well as new relational experiences leading to an increase in self-esteem and agency contribute to a change in the way the student interprets task and social situations, formulating expectations as to the results of their own actions and actually achieved results (see: Sroufe et al., 2021; Deptuła, Potorska, & Borsich, 2018, Chapter 4). Research on the importance of impact assessment for the classroom climate (Tłuściak-Deliowska & Czyżewska, 2020) indicate one of the ways of counteracting the sense of school helplessness.

The occurrence of learned helplessness in key areas for achieving success in life, and the achievement of success at school at the age of 7–12/13 years is such an area, particularly in subjects that are considered fundamental, that seriously threatens or prevents the execution of a task concerning this stage in life. Not only is a pupil incapable of developing their sense of competence in this area, they also cannot satisfy one of the fundamental human needs when experiencing learned helplessness, namely, the need for agency. Personal agency belongs to one of the four most important human motives. It is described as a sense of agency (Łukaszewski, 1984) and a sense of control (Wojciszke, 2013). In both cases, it concerns an individual’s conviction on being able to exercise control over the course of events, to “exert an impact on the course of events so as to change their course and change their effects” (Łukaszewski, 1984, p. 435). An increase in the actual or subjective control on events also leads to a greater inner motivation to act, to creativity and flexibility of thinking and acting, as well as to resilience, and to increasing positive emotions and self-esteem. It contributes to a better psychological wellbeing and objective health status. Therefore, the fact that a teacher – by fostering good relationships with pupils and good relationships amongst pupils and by changing their style of working and evaluating – can not only support pupils in the execution of their life task but can also have much greater job satisfaction thanks to the involvement and perseverance of pupils is of particular importance.

References
Abramson, L.Y., Seligman, M.E.P., & Teasdale, J. (1978). Learned helplessness in humans: Critique and reformulation. *Journal of Abnormal Psychology, 87*, 49–74.
Bańka, A. (2002). *Społeczna psychologia środowiskowa*. Warszawa: Wydawnictwo Naukowe Scholar.
Bedyńska, S., & Książek, M. (2012). *Statystyczny drogowskaz 3. Praktyczny przewodnik wykorzystania modeli regresji oraz równań strukturalnych*. Warszawa: Wydawnictwo Akademickie Sedno Spółka z o.o., Szkoła Wyższa Psychologii Społecznej.
Borsich, Sz., & Deptuła, M. (2020). Family Socio-Economic Status and Chances of School Success. *Przegląd Badań Edukacyjnych, 2*(31), 219–227. DOI: 10.12775/PBE.2020.028.
Brzezińska, A. (2000). 
*Społeczna psychologia rozwoju* [Social Psychology of Development]. Warszawa: Wydawnictwo Naukowe Scholar.

Brzezińska, A.I., Appelt, K., & Ziółkowska, B. (2016). 
*Psychologia rozwoju człowieka*. Sopot: GWP.

Ciżkowicz, B. (2009). 
*Wyuczona bezradność młodzieży*. Bydgoszcz: Wydawnictwo Uniwersytetu Kazimierza Wielkiego.

Cole, M. (1995). 
Strefa najbliższego rozwoju. Tam, gdzie kultura i poznanie współtworzą się wzajemnie. In: A. Brzezińska, G. Lutomska, & B. Smykowski (Eds.), *Dziecko wśród rówieśników i dorosłych* (pp. 15–38). Poznań: Zysk i S-ka Wydawnictwo.

Deptuła, M. (2013). 
*Odrzucenie rówieśnicze. Profilaktyka i terapia* [Peer Rejection: Prevention and Therapy]. Warszawa: Wydawnictwo Naukowe PWN.

Deptuła, M. (2019). 
Szanse rozwoju poczucia kompetencji w realizacji zadań szkolnych w klasach IV–VI szkoły podstawowej. Raport z badań empirycznych. In: P. Kostyło (Ed.), *Szkola równych szans. Namysł teoretyczny i rozwiązymania praktyczne* (pp. 118–142). Bydgoszcz, Warszawa: Wydawnictwo Uniwersytetu Kazimierza Wielkiego.

Deptuła, M., Potorska, A., & Borsich, Sz. (2018). 
Wczesna profilaktyka problemów w rozwoju psychosocjalnym i ryzykownych zachowań dzieci i młodzieży. Warszawa: Wydawnictwo Naukowe PWN.

Erikson, E.H. (1997). 
*Dzieciństwo i społeczeństwo*. Transl. P. Hejmej. Poznań: Dom Wydawniczy Rebis.

Försterling, F. (2005). 
*Atrybucje. Podstawowe teorie, badania i zastosowanie*. Gdańsk: GWP.

Jensen, E. (2013). 
How Poverty Affects Classroom Engagement. *Educational Leadership*, 70(8), 24–30.

Kofta, M., & Sędek, G. (1993). 
Wyuczona bezradność: podejście informacyjne. In: M. Kofta, (Ed.), *Psychologia aktywności: zaangażowanie, sprawstwo, bezradność* (pp. 171–224). Poznań: Nakom.

Kulesza, M. (2007). 
Klimat szkoły a zachowania przemocowe uczniów w świetle wybranych badań empirycznych. *Seminare: Poszukiwania naukowe*, 24(1), 261–277.

Ladd, G.W., Herald-Brown, S.L., & Reiser, M. (2008). 
Does Chronic Classroom Peer Rejection Predict the Development of Children’s Classroom Participation during the Grade School Years? *Child Development*, 79(4), 1001–1015.

Łukaszewski, W. (1984). 
*Szanse rozwoju osobowości*. Warszawa: Książka i Wiedza.

Łukaszewski, W. (2003). 
*Wielkie pytania psychologii*. Gdańsk: GWP.

Sentse, M., Lindenberg, S., Omvlee, A., Ormel, J., & Veenstra, R. (2010). 
Rejection and Acceptance across Contexts: Parents and Peers as Risks and Buffers for Early Adolescent Psychopathology. The TRAILS Study. *Journal of Abnormal Child Psychology*, 38(1), 119–130. DOI: 10.1007/s10802-009-9351-z.

Seligman, M.E.P. (1993). 
*Optymizmu można się nauczyć. Jak zmienić swoje myślenie i swoje życie*. Transl. A. Jankowski. Poznań: Media Rodzina.

Seligman, M.E.P. (1997). 
*Optymistyczne dziecko. Jak wychowywać dzieci, aby nauczyć je optymizmu i dawania sobie ze wszystkim rady*. Poznań: Wydawnictwo Media Rodzina.

Sedek, G., & Kofta, M. (1990). 
When cognitive exertion does not yield cognitive gain: Toward an informational explanation of learned helplessness. *Journal of Personality and Social Psychology*, 58(4), 729–743.
Smykowski, B. (2003). Porządek rozwoju funkcji psychicznych a dynamika form działalności dziecka. *Edukacja*, 1, 19–32.

Smykowski, B. (2012). *Psychologia kryzysów w kulturowym rozwoju dzieci i młodzieży*. Poznań: Wydawnictwo Naukowe UAM.

Smykowski, B. (2015). Teoria kryzysów a edukacja. *Ruch Pedagogiczny*, 2, 33-44.

Sroufe, L.A., Egeland, B., Carlson, E.A., & Collins, W.A. (2021). *Rozwój osoby. Ryzyko i adaptacja od narodzin do dorosłości*. Transl. R. Andruszko. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.

Tłuściak-Deliowska, A., & Czyżewska, M. (2020). *Tu chodzi o wspieranie mojego ucznia… czyli studium teoretyczno-empiryczne o ocenianiu kształtującym i klimacie szkoły*. Warszawa: Wydawnictwo Akademii Pedagogiki Specjalnej.

Wood, D. (2006). *Jak dzieci uczą się i myślą. Społeczne konteksty rozwoju poznawczego*. Transl. R. Pawlik, & A. Kowalcze-Pawlik. Kraków: Wydawnictwo Uniwersytetu Jagiellońskiego.

Wojciszke, B. (2013). *Psychologia społeczna*. Warszawa: Wydawnictwo Naukowe Scholar.