

Self-Control and Self-Regulation as Determinants of the Quality of Pupils Functioning In the School Environment

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Abstract:-Background. *The content of this article focuses on the issue of self-regulation of middle school students, showing its significance in adolescence, according to the Theory of Self-Regulation by Deci, the concept of Baumeister's self-regulation and the Helping Relationship Theory by Lawrence M. Brammer. Extensive research has been conducted on middle school students to establish the relationship between the level of selected aspects of self-regulation and the quality of functioning in the school environment from their own perspective. Theoretical viewpoint is the basis of the empirical part of this article.*

Aims. *It was assumed that there is a correlation between the level of self-regulation of students and the quality of their functioning in the school environment.*

Method. *Two questionnaires were used to measure the aspects of self-regulation: the first being the Learning Regulation Questionnaire (Deci, Williams, 1996) and the second being KBPK – Questionnaire for Locus of Control Study (QLCS) by G. Krasowicz and A. Kurzyp-Wojnarowska, 1990). The F/D-U survey (Gaś, 2004) was used to measure the aspects of the basic conditions in the process of supporting a child on the way to becoming mature.*

Results and conclusion. *The research analysis and conclusions constitute the practical implication in the field of the quality of the pupils' functioning in the school environment. The results can help to create an effective preventive and educational impact in the school environment.*

Key words:-*self-regulation, self-control, school environment, behavior, student*

Introduction

In recent years, social psychologists have been interested in focusing on self-regulation. Researchers compare the factors which support the process of students' self-regulation and identify the key processes in the field of risky behavior. They learn about the quality of relationships that are essential for the process of self-regulation, the role of motivation level and the process of learning. They recognize both skill development and the interventions taken in order to improve students' self-regulation (Schunk, 2005). More and more research is inclined to find a correlation between the success of young people in controlling their

behavior and emotions, and their social competences and conventional behavior.

The subject of self-regulation is very important, as self-regulation is clearly not an isolated skill (Blair, Diamond, 2008). Researchers find a relation between young people's success in controlling their behavior and emotions, and their social competence, school success, and healthy eating habits (Richards, Gross, 2000). However, researchers also state that children and adolescents who exhibit poor self-regulation abilities are at greater risk of peer rejection, social problems, delinquency and obesity (Trentacosta, Shaw, 2009). For this reason, it is

important to establish and improve children's ability to self-regulate. Which factors affect the success of controlling behaviour and emotions in the school environment: motivation level, children's developmental opportunities, goal setting or self-control?

The content of this article focuses on the problem of self-regulation by middle school students, showing its significance in adolescence, in the light of:

- the Self Determination Theory by Ryan, Deci (2000), which indicates the importance of some of its elements, such as: level of motivation and autonomous regulation versus controlled regulation, in the context of the proper functioning in school environment (Ryan, Deci, 2008);
- the concept of Baumeister's self-regulation (2004) underlining the importance of the ability to control and to change one's behaviour;
- the Helping Relationship Theory by Lawrence M. Brammer, which describes the supporting conditions of student's growth.

The main aim of this article, on the basis of theoretical consideration and need to deeply recognize the quality of students' functioning in the school environment, is to recognize and analyse the correlation between the level of students' self-regulation and the image of their perception of school. Whereas the practical aim is to make prevention activities work. Such action could be taken to increase the level of students' self-regulation at school. A diagnosis of the school environment might contribute to a decrease in dysfunctional behaviour at school.

This article is divided into two main parts: theoretical and methodological. At the end it also contains a discussion in the field of my own research. The theoretical introduction describes the process of student self-regulation and the quality of students' functioning in selected areas of the school environment. The methodological section contains the main aim, indicators of variables, statistical power and description of my own research results. The results were presented in the light of both

theory and the correlation between variables. The last paragraph shows concluding remarks and practical implications. The summary concludes the whole article.

Theoretical Approach

Social psychology shows many definitions of the concept of self-regulation. Carver defines self-regulation as the process that affects the ability to control responses (Carver, 2004). Blair adds that the ability to self-regulate is the foundation for complying with the accepted standards that are expected at home, school, and later, in the workplace. Self-regulation is often thought of as a dual cognitive and social-emotional process (Blair, Razza, 2007). Cognitive self-regulation is the degree to which children can be self-reflective, can plan and think ahead. Children with these strengths are in control of their thoughts. They are able to monitor and adjust their behavior, and evaluate their abilities, if necessary (Kanfer, 1970). On the other hand, social-emotional self-regulation is the ability to inhibit negative responses and delay gratification. An individual with this ability can control his or her emotional reactions to positive and negative situations. Furthermore, Self-Regulated Learning (SRL) refers to the effective regulation of one's own learning in the pursuit of personal goals. SRL is contextual in nature and changes dynamically in response to "episodes" experienced by the learner (Netfield, Shores, Hoffmann 2014).

This paper is based on the humanistic conception as well as the Helping Relationship Theory by Lawrence M. Brammer (1984), the concept of self-regulation by Baumeister (2004) and the Theory of Self-determination by Deci, Ryan (2008).

Self-determination Theory differentiates between types of behavioral regulation in terms of the degree to which they represent autonomous versus controlled functioning. This theory allows to give an answer for the question why is self-regulation important? There are some important elements in the process of self-regulation in the context of the proper functioning in the school environment (Ryan, Deci, 2000). Level of motivation, as a first,

is understood as an impulse to take an action in the field of school motivation, because intrinsic human needs facilitate internalization of extant values and regulatory processes, and they facilitate adjustment (Ryan, Deci, Grolnick, 1995). The significance of motivation level can be analysed according to: autonomous regulation, which focuses on the behavior two which a person applies as specific value, and controlled regulation, which focuses on the behavior that a person chooses to avoid punishment or to get a reward. Numerous studies show that autonomous regulation promotes perseverance, higher levels of achievement and greater work responsibility (Sheldon, Ryan, Deci, Kasse, 1995). Experiencing strong levels of autonomy means that a person is able to self-regulate their behavior, be active, determined and apply self-discipline (Deci, Ryan, 2008). In this model, people's propensities to regulate behavior through different strategies are assessed. Past research has shown autonomy to be positively associated with enhanced self-regulation, higher self-esteem, self-actualization and greater personality integration (Deci, Ryan, 1985; Koestner, Bernieri, Zuckerman, 1992; Williams, Deci, 1996).

It's opposite, controlled regulation, refers to regulation from outside the phenomenal self, by forces experienced as alien or pressuring, be they inner impulses or demands, or external contingencies of reward and punishment (Ryan, Deci, 2006, p. 1562). Those who are autonomy-oriented organize their behavioral regulation by taking a reflective interest in possibilities and choices, whilst those who are control-oriented tend to regulate behavior by focusing on perceived or ambient social contingencies, such as salient rewards and punishment (Ryan, Deci, 2006).

The next theory allows for an answer to the question why is self-control important?

I follow with a definition of self-control, derived from the concept of Baumeister's self-regulation (2004). Self-regulation is focused on the ability to determine one's own directions of activity and development, but a person needs the internal

resources to enable a change of the reaction as a result of, for example, a situation of social pressure (Vohs, Baumeister, 2004). Self-control is used to overcome affective, cognitive and behavioral tendencies that could otherwise prevent people from achieving their goals (Baumeister et al., 2007). As Schmeichel and Baumeister (2010) explained, attentional control helps people focus on task-relevant information and screen out task-irrelevant information. In that way, attentional self-control enables people to avoid distractions and thereby to focus on what is most relevant and important (Luszczynska, 2004). Reflecting this consideration to the school environment, it appears that high levels of self-control is important for students' behavior in the classroom, as they have to control their impulses in order to behave properly and concentrate on the lesson content. Additionally, self-control seems to be important for activities after school, when students organize and plan their free time on their own. As a result, self-control is defined as an individual's ability to alter his/her responses to fit in with social norms, moral standards and to support the pursuit of long-term goals (Baumeister, Vohs, Tice, 2007).

The theory also states that a persons' resources are limited and the exhaustion they feel is associated with a reduced ability to function efficiently. Baumeister et. al. suggest the term depletion of the ego, which relates to the risk of mistakes in self-regulation. The effect of depleted self-regulation can be altered by motivation, incentives and positive emotions. Numerous studies have shown that autonomy-supportive promote self-motivation (Grolnick, Ryan, 1989), satisfaction (Deci, Connel, Ryan, 1989) and performance in various settings (Benware, Deci, 1984; Koestner, Ryan, Bernieri, Holt, 1984). For example Deci, Cornell, Ryan (1989), Vallerand et all. (1992) found that when managers were more autonomy-supportive, their team members reported a higher level of trust in the corporation and more overall job satisfaction. This example can be perfectly applied to the classroom, where autonomy-supportive teachers positively

influence student behaviour as trust levels and overall satisfaction with learning increase.

Moreover, self-control is described as a crucial ability and key value to life-success that goes beyond the positive relation with academic achievement (Tangney, Baumeister, Boone, 2004). A high level of self-control is crucial for the regulation of behaviour in relation to long-term goals pursued through study (Mischel, Ayduk, 2002). Moreover it is a very important factor responsible for high quality relationships. I have emphasized that students capable of self-control are more successful as it has been found that they are better at selecting appropriate goals, as well as managing time and effort properly (Baumeister et al., 1998). When children regulate uncomfortable emotions, they can relax and focus on developing cognitive skills. Conversely, children who cannot effectively regulate anxiety or discouragement tend to move away from, rather than engage in, challenging learning activities.

It must be stated that having strong competence in the field of behavioral self-control is crucial in reducing conflict and aggression in interpersonal relations. Thus it determines the effectiveness of the activities one participates in and it determines appropriate social adaptation.

Summing up the considerations, it seems to be important to answer the main question why are self-regulation and self-control important?

A theory state that young children need to develop self-regulation because of the strong influence this ability has on school preparedness and building relationships with peers (Shonkoff, Phillips, 2000). Being able to suppress impulsive behaviors and to adjust behavior to be appropriate has been linked to positive outcomes for children and adolescents.

Some of these positive outcomes include:

- Higher academic achievement. Children who are self-regulated are more likely to perform well in school (Kuhnle, Hofer, Kilian, 2010).

- School engagement. Adolescents who delay gratification and adjust their behavior are more likely to be engaged in school. Moreover, such students tend to work harder than their peers who lack self-regulatory abilities (Shapiro, 2000).
- Peer social acceptance. Self-regulation is also linked with favourable perceptions of others. Children and adolescents who are able to control impulses and reflect on their actions are more likely to have friends and get along with others (McKown, Gumbiner, Russo, Lipton, 2009).
- voidance of negative behaviors. Self-regulated adolescents are less likely to engage in substance abuse, truancy and violence (McKown, Gumbiner, Russo, Lipton, 2009).

As self-regulation influences different domains, regulation of one domain affects other areas of development. Emotional and cognitive self-regulation are not separate or distinct skills. It is what helps children focus on learning when they might be distracted by others, upset by a problem, or excited about an upcoming event. The ability to self-regulate helps children get along better with teachers and their peers (McKown, Gumbiner, Russo, Lipton, 2009). Good self-regulation skills play an important role in building socio-emotional competence (Denham, 2006; McKown, 2009). Self-regulation in school settings increases success in problem solving, academic achievement and intrinsic motivation (Cleary, Zimmerman, 2004). The impact of self-regulation also extends beyond educational life, since self-regulatory skills equip students with more positive views towards their future, empower them to manage their social behavior, and support the development of lifelong learning skills. Fortunately, various studies have repeatedly indicated learning and teaching self-regulation is achievable. Extensive research has shown that appropriate adjustments made to the learning environment and teaching practices have a positive effect on pupils' ability to learn and develop of self-regulation (Perels, Dignath,

Schmitz, 2009). Teachers play a crucial role in promoting self-regulatory processes (Zimmerman, 2002). Despite the fact that primary school teachers positively believe that the introduction of self-regulation learning in their own classroom may be efficient, different elements still prevent them from fully promoting it (Dignath-van Ewijk, Van der Werf, 2012; Lombaerts, Engels, Van Braak, 2009).

The Helping Relationship Theory by Lawrence M. Brammer highlights the quality of functioning of adolescents in the school environment in light of humanistic psychology. According to this theory, the main role of a teacher in the process is to be supportive, by creating a friendly environment, where students could have a chance to identify and achieve these developmental goals (Brammer, 1984). This is possible, when the combination of a teacher's personality and his/her ability to cooperate with pupils creates a chance to increase specific aims connected with the quality of students' functioning. The basic conditions needed to assist with students' maturation include the experience of understanding and acceptance, forming an emotional bond with the tutor, openness, mutual respect as well as a sense of certain limits in life and development, sharing the responsibility for changing the educational process (Brammer, 1984; Gaś, 2006). Therefore, creating conditions which support students to achieve developmental goals is a way to prevent dysfunctions (Gaś, 2006). An important and direct source of information about the quality of conditions conducive to students' development is the student himself / herself (Kuchcińska, 1997).

Based on the concept of the Helping Theory by L. M. Brammer, adapted by the Z.B Gaś for understanding educational interaction, researchers list five main variables that constitute conditions for the quality of contact with a student: experience of understanding and acceptance, a sense of emotional bond with the tutor, openness, mutual respect but also an awareness of certain limitations in life and sharing the responsibility for changing educational process (Brammer, 1984). Only when these

conditions are respected, a child's development and behavior show the result of specific benefits that are useful for him / her and the society within he / she lives. Consequently, in order to limit or counteract dysfunctions, students should have a chance to achieve their goals and fulfill their needs. That is why pupils themselves are crucial and a direct means of information on development-friendly conditions, whilst their psychosocial functioning is an indirect factor. But it turns out that some school environments can support the process of students' self-regulation more effectively than others. That's why students' perception of the school environment has been limited to the assumption that students' functional quality in the teacher-student relationship is defined by the conditions the teacher establishes with the student (Brammer, 1984; Gaś, 2006).

I assume that particular factors that are specific to the school environment and that meet the needs of students, enhance the level of motivation and sense of autonomy, will be a strong predictor of emotional and cognitive involvement. These factors contribute to supporting the comprehensive development of students and, in effect, have impact on proper functioning.

Methodological Aids.

The research matter was an attempt to answer the following question: 'Is there any correlation between the level of self-regulation of medium school students and the level of their functioning in school environment'? It requires identification of the level indicators of self-regulation and image indicators of the school environment. In order to clarify the problems, it was limited to the analysis of selected indicators of self-regulation (autonomous regulation and controlled regulation), and the ability to control in the light of change of their behavior (scale of success and scale of failure). Whereas dependent variable, the quality of functioning in the school environment, is shown on the quality of contacts with the teacher (the degree of conditions supporting growth in the light of students' experience).

It is accepted that level of student's self-regulation, sense of external / internal control and level of experienced conditions supporting students development have a correlation with the quality of their functioning in the school environment.

Students who show external sense of control and low level of self-regulation will have more dysfunctional relations with teachers because of low level of experience in the field of conditions that support their growth.

Table 1:-Indicators of variable

Indicators of the variable:	
Independent variables	Dependent variables
Indicators of students' self-regulation: - autonomous regulation - controlled regulation	The quality contacts with teachers: - the degree of experience of the conditions that support the student's development
The ability to control in the light of change their behavior: - scale of success - scale of failure	

Source: own research

Participants

There were 198 middle school students from Bialystok in the research: three groups of first grades, three second grades, three third grades, in all 94 girls and 106 boys, aged 14-17.

The research took place in a public middle school in Bialystok, in the period from March to May 2014.

Measures

To determine the level of self-regulation and the level of self-control the following were used:

-The Self-Regulation Questionnaire-Learning (SRQ-L) by Deci, Ryan, Williams (1996). It asks three questions about why people engage in learning-related behaviors. This questionnaire was includes just two subscales: controlled regulation and autonomous regulation. The Cronbach's alpha for the two subscales is .75 for controlled regulation and .80 for autonomous regulation. The theoretical basis of this questionnaire is Deci and Ryan theory;

The previous research in the field of relation between SRL and academic performance amongst students shows that it has a positive relation that include motivational as well as learning strategy aspects of SRL (Azlina, 2007). Effeney, Carroll, & Bahr, (2013) investigated the sources of successful SRL strategies in a teaching environment concluded that teachers were the most commonly identified

source of various SRL strategies. Cheng (2011) demonstrated that students' learning performances in Hong Kong were closely related to their learning motivation, goal setting, action control and learning strategies. The findings also showed that students obtained higher scores when they used appropriate SRL strategies (Yen et al. 2006; Ahmad Sayuti Z.A., Mohd Rafee B.B., Murni Illani J., Suhaily A., 2015).

- The Questionnaire for Locus of Control Study (QLCS) by Krasowicz and Kurzyp-Wojnarska, (1990), which contains 46 questions grouped according to diagnostic answer key in situations of failure (scale P) and success (scale S). It is used to measure the personality variable, the sense of locus of control, described in the light of theory of social learning by J.B. Rotter. The research highlighted that the external locus of control fosters anti-health behaviour (Strzelecki W., Cybulski M., Strzelecka M., 2009). The analyses of research conducted by Kobylarczyk M. and Ogińska-Bulik N. (2015) indicated a mediating role of resiliency in the relationship between locus of control and personal growth. The wide application of this questionnaire is confirmed by research conducted by K. Jaros and U. Oszwa (2014) among girls from 13 to 18 years old with anorexia readiness syndrome and without this syndrome. The results did not confirm the

hypothesis about the correlation between LOC and the tendency to respond by abnormal attitude to eating and own body in difficult situations in both groups.

To determine the quality of functioning in the school environment the following questionnaire was used:

- The Questionnaire Lesson Assessment-Students (OZ-U) by Zb. B. Gaś (2004) to measure the degree of basic conditions in the process of supporting a child on his / her way to maturity. It includes 15 items. The student responds by selecting one of the five possible answers. Obtained results of research (expressed in sten grade) allow to recognition the intensity of three indicators of teachers' work quality (KI-Interpersonal Contact; JN-Quality of Learning; OOO-General Assessment of Courses). The KI scale allows to evaluate the teacher's way of treating students in the light of the students' perception. The JN scale allows to assess the quality of didactic activities conducted by the teacher. The OOO scale measures the general level of the courses' quality. The Cronbach's alpha for the three subscales is $r=0.92$ for Interpersonal Contact, $r=0.81$ for Quality of Learning and $r=0.94$ for General Assessment of Courses.

Statistical Power

In the statistical analysis of the data:

- χ^2 Pearson independence test was used to evaluate the relation between the features of qualitative and quantitative,
- T-test-for independent groups to compare averages. The study takes two gender groups into account.
- the analysis of variance ANOVA for three independent groups was also used.

The study takes into account three groups according to the class. All analyses were done in the SPSS 20.0 program. The hypotheses were verified at a significance level of 0.05.

Results.

The analyses of the correlations between the level of students' self-regulation the level of self-control and experience of the conditions that support students' growth will begin with the presentation of data on the level of self-regulation.

Results in the light of The Theory of Self-Regulation (Deci, Ryan)

The analysis of research was made on the basis of selected data that will be used to describe the indicators associated with the level of self-regulation among middle school students. I will begin my considerations with a presentation of the data that have been collected on the basis of Learning Self-Regulation Questionnaire. It asks three questions about why students engage in learning-related behaviors. This questionnaire was formed with two subscales: controlled regulation and autonomous regulation. Researchers have selected the task on the sevenfold scale (from 7-very true to the 1-not at all true) in these questions: A) I will participate actively in the school life, B) I am likely to follow my instructor's suggestions for interviewing C) The reason that I will continue to broaden my interviewing skills is.

To make a recognition of the opinion of middle school students in the field of self-regulation T-test for independent groups was used.

Table 2:- The level of students' self-regulation (The questionnaire SRQ-L)

Content of question	Answers	Girls		Boys		Total		Comparisons between groups girls / boys	
		N	%	N	%	N=200	%	t	p.i.
		= 94		= 106					
Because I would get a good grade if I do what he/she suggest	Not at all true	15	15.9	32	30.2	47	23.5	3.029	.003
	Somewhat true	19	20.2	27	25.5	46	23.0		
	Very true	60	63.8	47	44.3	107	53.5		
Because I believe my instructor's suggestions will help me to fulfil the school's tasks	Not at all true	19	20.2	40	37.7	59	29.5	3.044	.003
	Somewhat true	28	29.8	32	30.2	60	30		
	Very true	47	50.0	34	32.0	81	40.5		
Because it's easier to do what I'm told than to think about it	Not at all true	21	22.3	47	44.3	68	34	3.785	.002
	Somewhat true	27	28.7	32	30.2	59	29.5		
	Very true	46	48.9	27	25.5	73	36.5		
Because it's important to me to do well at this	Not at all true	22	23.5	36	34.0	58	29.0	3.001	.003
	Somewhat true	17	18.1	30	28.3	47	23.5		
	Very true	55	58.6	40	37.7	95	47.5		
Because I would feel proud if I did continued to improve my skills	Not at all true	14	15.1	31	29.3	45	22.5	2.983	.003
	Somewhat true	22	23.4	28	26.5	50	25.0		
	Very true	58	62.7	47	44.4	105	52.5		
Because it's interesting to use the interview to try to identify what skills I have	Not at all true	17	18.1	30	28.3	47	23.5	2.277	.024
	Somewhat true	24	25.5	27	25.5	51	25.5		
	Very true	53	56.4	49	46.3	102	51.0		

Source: own research

On the basis of the analysis of the data, it can be stated that 53.5% of students declare, that probably they will do what teachers suggest because they would get a good grade. The same tendency is shown in the following questions:

- I will believe my instructor’s suggestions because it help me to fulfil the school's tasks-40.5% of students (50.0% of girls and 32.0% of boys), and
- because it's important to me to do well at this-47.5% of students (58.6% of girls and 37.7% of boys) and

- because I would feel proud if I did continued to improve my skills-52.5% of students (62.7% of girls and 44.4% of boys)
- because it's interesting to use the interview to try to identify what skills I have–51.0% of students (56.4% of girls and 46.3% of boys).

On the basis of the analysis of table 1 the conclusion indicates that it is important for students to get a good mark and to fulfil their obligations as best as possible. On the other hand, girls also state that it is easier for them to do what they are told by

the teacher than think autonomously. They want to be proud that they do tasks as good as they can.

The achieved results suggest that girls possess a higher means of values of self-regulation than boys.

Table 3:- The mean of indicators for the level of students' self-regulation (T-student, the statistic for the group)

content of question	Sex F=1,M=2	N	The mean	Standard deviation	Standard error of mean
Because I would get a good grade if I do what he/she suggest	1	94	5.15	1.87	0.19
	2	106	4.35	1.85	0.18
Because I believe my instructor's suggestions will help me to fulfil the school's tasks	1	94	4.64	1.69	0.17
	2	106	3.93	1.57	0.15
Because it's easier to do what I'm told than to think about it	1	94	4.59	1.81	0.18
	2	106	3.65	1.67	0.16
Because it's important to me to do well at this	1	94	4.99	1.80	0.18
	2	106	4.24	1.74	0.16
Because I would feel proud if I did continued to improve my skills	1	94	5.02	1.49	0.15
	2	106	4.31	1.82	0.17
Because it's interesting to use the interview to try to identify what skills I have	1	94	4.83	1.67	0.17
	2		4.27	1.77	

Source: own research

Taking into account the analysis of responses in the area of self-regulation the division of the class level should be emphasized. Statistical analysis of the data shows significant results in the answer to one question The analysis of the statistically significant results the answer to only one question

- 'I will participate actively in the school life, because I feel like it's a good way to improve my skills and my understanding of peers' (F(3, 197) = 5.95, p<0.05). It means that the field of autonomy regulation alters the data which focus on the division on class level in a statistically significant way. The first graders, who begin their education in middle school, have much stronger sense of autonomous regulation (38.2%) than the third graders (17.4%), who finish their education.

Results in the light of the concept of Baumeister's self-regulation.

The analysis of data obtained in the field of control by The Questionnaire for Locus of Control Study (QLCS) by Krasowicz and Kurzyp-Wojnarska (1990), in which students were asked to select the

This is linked with autonomous and controlled regulation than boys.

The following table presents the mean in different groups based on gender that confirms these trends.

answers to true for them in 46 questions of the questionnaire allowed to collect the data both, in the field of scale of success and in the scale of failure. Both of these scales show internal or external locus of control.

The group of boys and girls is different in the area of control on the scale of success, and this difference is statistically significant (t (198) = 3.873; p<0.01). Students' group have an external locus of control on the scale of success (50.5%) including 65.1% of boys and 34.0% of girls.

In addition, the average values of the general indicators of the scale of control indicate that girls have a higher level of internal locus of control on a scale of success than boys (average for girls: 1.88, for boys: 1.48).

The analysis of sense of control in the group of students shows that students of Ist, IInd, IIIrd grades have external locus of control (F(23, 197) = 6.106, p<0.05) and this difference is statistically significant. The analysis for each class indicates that external locus of control is the highest in IIIrd grade

(57.4% of students I class, 60.9% of students II class i 84.1% of students III class).

Results in the light of the Helping Relationship Theory by Lawrence M. Brammer.

Another analysis of the conditions supporting growth, which are posed by the teachers in relation with the students, made on the basis of The Questionnaire Lesson Assessment- Students (OZ-U) by Zb. B. Gaś (2004). While answering the questions students were given the task to define the 5-degree scale questionnaire (from 5-very to 1-little) how the statement applies to him / her personally.

Recognizing the opinion of middle school students in the field of conditions that support their growth, I set the hypothesis that there is a correlation between

Table 4:- The sex and the frequency of experienced conditions supporting growth

The criteria of lessons' evaluation	The class level	The mean	Standard deviation	Comparisons between groups		
				t	df	p.i.
The attractiveness of lessons	I class	3.35	1.231	5.869	199	0.034
	II class	3.05	1.316			
	III class	2.62	1.128			
Use of time during the lesson	I class	3.68	1.029	7.820	199	0.001
	II class	3.16	1,052			
	III class	2.92	1.236			
The student's independence	I class	3.40	1.021	3.437	199	0.034
	II class	2.94	1.069			
	III class	3.00	1.205			
The amount of knowledge	I class	3.69	1.200	7.110	199	0.001
	II class	3.52	1.232			
	III class	2.92	1.235			
Activity of students	I class	3.22	1.077	16.167	199	0.000
	II class	3.06	1.083			
	III class	2.22	1.054			
The sense of student's safety	I class	3.71	1.052	6.911	199	0.001
	II class	3.29	1.307			
	III class	2.90	1.329			

Source: own resear

On the basis of the analysis of table 4 it could be stated that Ist grade students declare that the attractiveness of lessons is on very high level while only one IIIrd grade student declares that it is on very high level. It clearly emphasizes a downward tendency over the grades and years of studying in middle school. The analysis also indicates, that Ist

the degree of experience of the conditions that support the students' development and the quality of relationships with teachers. Students who experience these conditions in low degree will have dysfunctional relations with teachers and low level of self-regulation. In this field, I assume that the degree of experience of the conditions is different based on gender and class level. I also assume that the level of self-regulation is associated with the experience of supportive growth.

The analysis of frequency of conditions, which are experienced by the students (division on class level), is presented in table 4. The analysis is present only based on statistically significant results. The data division by gender are not statistically significant.

graders experience the useful time during the lessons and their independence on the higher level than students of IIIrd grade.

Downward tendency among the years of study in middle school students is clearly visible. A similar trend is held in the analysis of the following sentences. Students of Ist grade declare that the

amount of knowledge and sense of students' safety are on very high level and students' activity is on high level. To sum up this part of the analysis it should be noted that there is strong statistical difference between various dimensions in students' perception. Students of Ist grade, who start their own education in middle school declare higher sense of attractiveness of lessons, usefulness of school's time, independence, amount of knowledge, activity and sense of security than students of IIIrd grade.

Correlation between the level of self-regulation, sense of self control and quality of the conditions supporting growth.

In addition to these trends, it seems to be important to show the level of students' self-regulation, sense of control and conditions supporting growth in the light of correlation between these three dimensions. In the first part of the theoretical consideration the existence of that correlation was assumed.

Table 8:- Pearson's correlation between different dimensions: sense of control, sense of failures and level of self-regulation

The particular questions from Learning Questionnaire (SRQ-L)	The scale of success	The scale of failures
I will participate actively in the systems classes, because I feel like it's good way to improve my skills	0,243 p<0.01	0,146 p<0.05
I will participate actively in the systems classes, because learning to interview well is an important part of understanding the other students	0,303 p<0.00	0,215 p<0.05
I am likely to follow my instructor's suggestions, because I would get a good grade if I do what he / she suggest	0,275 p<0.00	0,175 p<0.05
I am likely to follow my instructor's suggestions, because I believe my instructor's suggestions will help me interview effectively	0,360 p<0.00	0,239 p<0.05
I am likely to follow my instructor's suggestions, because it's important to me to do well at this	0,392 p<0.00	0,243 p<0.00
The reason that I will continue to broaden my interviewing skills is because I would feel proud if I did continued to improve my skills	0,204 p<0.05	0,224 p<0.01

Source: own research

Based on the analysis of Pearson's correlation between the variables taken into account in this research, it turned out that:

- when the sense of students' control in the scale of success ($r = .243$) and in the scale of failures ($r = .146$) is increasing, then students will participate more actively in the systems classes, because they feel like it's good way to improve their skills (SQR-L) and

- the stronger sense of control in the scale of success ($r = .303$) and in the scale of failures ($r = .215$) the stronger students' declarations that they will participate actively in the systems classes, because learning to interview well is an important part of understanding the other students (SQR-L).

In addition, with increasing students' sense of control in the scale of success ($r = .275$) and in the

scale of failures ($r = .175$) students more often declare that they are likely to follow their instructor's suggestions, because they would get a good grade if they do what he / she suggests and also they are likely to follow their instructor's suggestions, because they believe their instructor's suggestions will help interview effectively (the scale of success ($r = .360$), the scale of failures ($r = .239$).

Students who have strong sense of control in the scale of success ($r = .392$) and in the scale of failures ($r = .248$) have also strong declaration, that they will be likely to follow their instructor's suggestions, because it's important to do well at this and that they will continue to broaden skills because they would feel proud if they continued to improve their skills (the scale of success ($r = .204$), the scale of failures ($r = .224$). In conclusion, the data indicates

the association between two dimensions: the sense of students' control and the autonomous regulation, even though it shows weak level of association between these variables. Further analysis, for

example the regression analysis, can emphasize the predictor of self-regulation in the light of sense of success and sense of failure.

Table 9:- Pearson's correlation between different dimension: the conditions supporting growth and sense of control

The conditions supporting growth (OZ-U by Zb. B. Gaś)	The scale of success (QLCS)	The scale of failures (QLCS)
Use of time during the lesson	.178 p<0.012, N=200	.327 p<0.000, N=200
The amount of knowledge	.146 p<0.039, N=200	.364 p<0.013, N=200
Respect of the teacher to student	.207 p<0.003, N=200	.296 p<0.000, N=200
The kindness of the teacher to the student	.197 p<0.005, N=200	.313 p<0.000, N=200
The sense of student's safety	.180 p<0.011, N=200	.274 p<0.000, N=200

Source: own research

Recognizing the features of correlation between the conditions supporting students' growth and the sense of control statistically significance correlations should be presented.

The following conditions: sharing responsibility for changing the educational process, sense of certain limits in life and development, openness in mutual relation and sense of emotional bonds are strongly

linked with the scale of success and the scale of failures in the area of sense of control. It means that the higher level of conditions supporting students' growth, the stronger level of their sense of control. It also indicates, that the students, who have a high level of self-control can regulate their impulses in order to behave properly and concentrate on the content of the lesson. They have experienced, that the teacher has been supporting their growth.

Table 10:- Pearson's correlation between different dimensions: conditions supporting growth (OZ-U) and level of self-regulation (SRQ)

Dimensions	Use of time during the lesson	Activity of students	Knowledge of the teacher's requirements	Ability to negotiate the grade	Ability to ask questions	Respect of the teacher to student	Sense of student's satisfaction
Because learning to interview well is an important part of becoming a students	.141 p<0.047 N=200	.224 p<0.001 N=200	.163 p<0.021 N=200	.202 p<0.004 N=200	.258 p<0.000 N=200	.226 p<0.001 N=200	.178 p<0.012, N=200
Because I believe my instructor's suggestions will help me interview effectively	n.i.	n.i.	n.i.	n.i.	.170 p<0.016 N=200	.167 p<0.018 N=200	n.i.
Because it's important to me to do well at this	.149 p<0.035 N=200	.173 p<0.014 N=200	.185 p<0.009 N=200	n.i.	n.i.	n.i.	n.i.
Because it's exciting to try new ways to work interpersonally with students	n.i.	n.i.	n.i.	n.i.	.220 p<0.002, N=200	.177 p<0.012 N=200	n.i.
Because I would feel proud if I did continued to improve my skills	n.i.	n.i.	.179 p<0.011 N=200	n.i.	.243 p<0.001 N=200	.166 p<0.018 N=200	n.i.

Source: own research

On the basis of these correlations the conclusion suggests that the conditions supporting growth are strongly linked with autonomous self-regulation. Some of the conditions, for example: knowledge of the teacher's requirements, ability to ask questions and mutual respect are linked with controlled self-regulation.

It means, that the students, who have a high level of autonomous self-regulation have an experience that the teacher supports their growth. The students organize their behavioral regulation by taking reflective interest in possibilities and choices. The students, who have a high level of controlled regulation focus on behavior that they choose to avoid punishment or to get a reward.

Concluding remarks and practical implications.

As a result the hypothesis has been confirmed. It is accepted that the level of student's self-regulation, sense of external / internal control and the experienced conditions supporting students growth correlate with the quality of their functioning in the school environment. Students who show an external sense of control and a low level of self-regulation will have more dysfunctional relations with teachers because of a low level of experience in the field of conditions that support their growth.

Sum-up of the research in the light of the Baumeister's theory allows the following question to be answered: why self-control is important in the school environment?

General data shows that the students in middle school have external locus of control on the scale of success (50.5%). But on the other hand the data shows that girls have a higher level of internal locus of control on the scale of success than boys. It seems that the results of an internal locus of control in the group of girls positively correlates with high school achievement. In this light girls' experience seems to be significant. It is interesting that girls prefer listening to the teacher's advice in order to take the initiative themselves. Correlation r -Pearson exhibits the dependence between the sense of self-control and the level of self-regulation. The higher

the level of self-control, the higher the level of student's self-regulation will be.

The analysis of sense of control in the group of students shows that students of Ist, IInd, IIIrd grades have external locus of control ($F(23, 197) = 6.106, p < 0.05$). The analysis for each class indicates that external locus of control is the highest in III rd grade.

Reflecting the research to psychological theory it is presented that these students can have low self-acceptance. They focus on irrelevant tasks and they do not achieve long terms goals. It also means that students can be passive in difficult social situations.

These results should be viewed in connection with standards of adolescents' development, which emphasize high self-criticism that during this time of growth students have a tendency toward a high level of internalizing failure and low level of internalizing success. This passive attitude in school can cause unwillingness to participate in social activities. It is linked with low motivation to succeed, because according to students' perception situations, what happens to them does not depend on themselves or their activities. They take no responsibility for their own activity due to the situation of social influence or pressure. Generally, the psychological theory states that students with external sense of control have a tendency to develop high level of anxiety, they feel worse at selecting appropriate goals and managing time and effort properly.

Practical implication emphasized that:

1. In order to make prevention activities in the field of internal locus of control, educators should intensify social situations to focus on relevant tasks and achieve long terms goals. Students can be active in difficult social situation. The higher opportunities, the higher motivation to achieve success will be;
2. Teachers should increase students' conviction (especially boys' convictions) that they are responsible for school tasks;

The sum-up of the research results in the light of the Deci, Ryan's theory, allows to answer the question: what is the level of self-regulation of middle school students?

It seems that girls have higher level of autonomous and controlled self-regulation in the scale of success than boys (the average value for girls: N= 98 is 1.88, for boys: N = 106 is 1.48). It means that girls are able to self-regulate their behavior, be active, responsible and show self-discipline (autonomous regulation) (Deci, Ryan, 2008). It also means, that girls may have a tendency to acquire information that is important to solve tasks and effectively use information in new situations. Girls with internal locus of control may be convinced that their actions are effective. When they want something they are able to achieve it. They are also more active in problematic situations, and these situations allow them to demonstrate their own abilities and skills. In addition, they tend to acquire information to solve problems.

On the other hand, when the girls' activity is dictated by the teacher's advice, not their inner conviction, girls are willing to see the causes of failures in external factors (outside their control). High levels of achievement do not contribute to the improvement of their well – being (Deci, Ryan, 2008).

The research results clarify the main conclusion: in order to organize social situations for students who have sense of internal locus of control (it means that their actions are successful and they are able to achieve what they want), teachers can motivate pupils to do school work and increase their activity in problematic and difficult situations.

The sum-up of the research results in the light of the Brammer's theory allows to answer the question: what are the conditions supporting growth in the perception of middle school students?

1st graders experience the sense of the attractiveness of the course, the use of time during lessons, the amount of knowledge, students' activity and the sense of security on the higher level than 3rd

graders. My research clearly emphasized a downward tendency over the grades and years of study in middle school.

To summarize this part of the analysis in the field of conditions supporting growth, in the light of the Helping Relationship Theory by Lawrence M. Brammer, it should be stated that openness in mutual relations is high. This is a good estimation because students' open attitude is strongly linked with teachers' open attitude and it is also linked with trust and self-confidence. The next important indicator, which supports student's growth is the sense of emotional bond n with the teacher (Brammer, 1984). This condition is understood as ensuring the sense of students' security. Besides this, my own research shows a high level of sense of certain limits in students' live and development and sharing the responsibility for changing the educational process. It means that the teachers clearly establish the rights and obligations (which are adapted to the student's age and maturity level) and determines understandable and realistic consequences of breaking the bonds. The analysis of the data emphasizes that the students in the 1st grade declare a high level of conditions supporting growth.

The practical suggestion emphasized that creating conditions for students, which can help them achieve developmental goals is a way to advance the level of self-regulation and prevent dysfunctions. Young people have a potential capacity of healthy and productive development. Blocking the possibility of development becomes the cause of dysfunction. Further analysis and correlations will show this dependence.

Summary.

Among the main issues which exist at school, the quality of students' functioning is very important. It should be related to the support of their development (Gaś, 2000). During the period of many significant changes, it is the school that should play a more conscious and responsible role in supporting student's personal development. The diagnosis of the protective factors, which increase

conventional level of students' development might contribute to a decrease in dysfunctional behaviour at school. Recognition of the quality of relations with teachers (on the basis of pupils' evaluation) can help to create a real didactic and preventive interaction in school. A recognition of the school environment will enable one to map out some didactic and appropriate preventive actions to support pupils' development.

Teachers can take responsibility to support students' development by planning effective educational and prevention programs, because the results of national studies indicate a dangerous change associated with lowering of the level of schools' functioning. The weakest in the area of teaching and upbringing are middle schools (Mantur, 2012). My own research indicates that there is a correlation between the level of self-regulation among middle school students and the perception of the school environment. It is clear that indicators of students' self-regulation are related to the quality of their functioning in the school environment. The aim of practical considerations was to create guidelines and actions that should be taken in the school environment to increase the level of students' self-regulation. The results of this study prove that it is necessary to reinforce boys' internal level of control.

Furthermore, the methods which are implemented in my research, might serve as methods to be used in diagnosis and prevention activities. In addition, reliable recognition of the processes that take place in the school environment can help teachers, school management, parents and students in their efforts to prevent risky behavior in the school environment.

Ample evidence has already indicated that individual differences in self-control affect adjustment, performance and behavior, including those displayed in school settings (Kuhnle et al., 2010; Oertig et al., 2013). For this reason the following question is fundamental: what is the way to succeed in controlling behaviour and emotions in the school environment: motivation level, children's

developmental opportunities, goal setting or self-control?

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