THE LEVEL OF MOTIVATION AND SELF-REGULATION AS DETERMINANTS OF THE QUALITY OF PUPILS FUNCTIONING IN THE SCHOOL ENVIRONMENT

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Abstract

Background: The content of the article focuses on the issue of self-regulation of middle school students, showing its significance in adolescent, in the light of the Theory of Self-Regulation (Deci), the concept of Baumeister's self-regulation and the Helping Relationship Theory by Lawrence M. Brammer. Various research has been conducted among middle school students, in order to establish the relationship between the level of selected areas of self-regulation and the quality of functioning in the school environment in the perception of those students. Theoretical viewpoint is the basis for the empirical part of the article.

Aims: It was assumed that there is a correlation between the level of motivation and the level of self-regulation and the quality of student's functioning in the school environment.

Method: To measure the aspects of self-regulation, two questionnaire were used: the first one: Learning Regulation Questionnaire (Deci & Williams, 1996) and the School Motivation Questionnaire (Sterczyński, 2010). The F/D-U survey (Gaś, 2004) was used to measure the aspects of the basic conditions in the process of supporting a child in his or her way of achieving maturity. Results and conclusion: The research analysis and conclusions constitute the practical implication in the field of the quality of pupils' functioning in the school environment. They constitute the practical implication in the field of the quality of functioning pupils in the school environment. The results can help to create effective preventive and

educational impact in the school environment.

Keywords

Self-Regulation, Motivation, Self-Control, School Environment, Behavior, Student

1. Introduction

The concept of self-regulation has become increasing interest in research focuses on the area of social psychology. The scientist compare the factors of supporting the process of students' self-regulation and risk factors in order to determine the process of change (Zimmerman, 1989), recognize the quality of relations which is essential to the process of self-regulation (Baumeister, Heatherton, & Tice, 1994), motivation and learning; recognize the developmental skills in the process of self-regulation (Schunk, 2005); compare the interventions to improve students' self-regulation (Schunk, 2005). In this light of view, the content of the article focuses on the issue of self-regulation of middle school students, showing its significance in adolescence.

Theoretical background focuses on 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 (Deci, & Ryan, 2000), and 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 needs to deeply recognize the quality of students functioning in the school environment, is to recognize and analyze correlation between the level of students' self-regulation and the level of students' motivation. Whereas the practical aim is to make prevention activities work. This action could be taken to increase the level of students' self-regulation at school. The diagnosis of the school situation might contribute to a decrease in dysfunctional behaviour at school.

The article is divided into theoretical and methodological parts. Theoretical approach describes the process of students' self-regulation and selected areas of the quality of students' functioning in the school environment. Methodological part contains the main aim, indicators of variable, statistical power and description of my own research results. The results were presented in the light of theory and also in the light of correlation between variables. The last paragraph shows concluding remarks and practical implications. The summary ends the whole article.

2. Theoretical Approach

The Humanistic psychology focuses on the self-regulation as the main source of development and mental health. It should be noted that it is difficult to define or present the definition of self-regulation, probably because it is a multidimensional construct that is difficult to describe. General approach to self-regulation can look at it from three perspectives: emotional, cognitive and social development. The classic definition of self-regulation defines this concept as the ability to control their own behavior and determinate consciously and intentionally. Carver defines self-regulation as the process that affects the ability to control responses (Carver, 2004), Metcalfe i Mischel pay attention to the essential conscious and intentional plan to control behavior in order to overcome the influence from the environment. On the other hand, the theory of self-regulation by Baumeister (2007) states that self-regulation is the ability to change behavior. This skills could be increase by adaptability, which allow to adjust the actions to situational and social requirements (Baummeister & Vohs, 2004). 'The concept of self-regulation in an academic context is known as academic self-regulation. Self-regulation capacity represents one's competence to self-manage. It encompasses the processes such as a planning, generating, controlling, self-reflection, and adjusting thoughts, feelings, and actions in order to achieve personal goals' (Mesárošová, 2017, p. 587).

Self Determination Theory (Deci & Ryan, 2008) differentiates types of behavioral regulation in terms of the degree to which they represent autonomous versus controlled functioning.

Numerous researches show that *autonomous regulation* promotes perseverance in action, higher results achievement and work responsibility (Sheldon & Kasse, 1995). Experiencing high levels of autonomy means that a person is able to self-regulate their behavior, be active, determined and show self-discipline (Deci & Ryan, 2008). In this model, people's propensities to regulate behavior through different strategies are assessed. The autonomy refers to people's tendency to be self-regulating and to orient toward the interest value of the environment and the contextual support for self-initiation. In past studies, the autonomy has been associated positively with enhanced self-regulation, higher self-esteem, self-actualization and greater personality integration (Deci & Ryan, 1985; Koestner, Bernieri, & Zuckerman, 1992; Williams & Deci, 1996).

'Its 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 reflective interest in

possibilities and choices, those who are *control oriented* tend to regulate behavior by focusing on perceived or ambient social contingencies, such as alient rewards and punishment (Ryan & Deci, 2006).

The Humanistic psychology focuses also on the process of motivation. Theoretical considerations in this area should begin to mention the views of Apter's theory (Apter, 2001; Apter, 2007). In this theory, the authors attempts to identify the important factors which determine the direction of human behavior and lists 5 scales of motivation: desirability, the need for experience, the need of belonging to a group, focus on yourself, focus on physical and emotional values. An alternative to the Apters' theory is presented Self-determination theory formulated by Deci and Ryan's. Edward L. Deci and Richard M. Ryan had been looking for answer to the question 'what factors determine that some people, enjoying the well-being, can grow and work with commitment, and others are counting down the hours on the weekend?' They drew up a theory, which consists of two concepts: motivation and basic psychological needs.

Level of motivation is understood as an impulse to take an action in the field of school learning, because intrinsic human needs facilitate internalization of extant values and regulatory processes, and they facilitate adjustment. It is needs satisfaction, that provides human growth and development (Ryan, 1995). The significance of motivation level can be analyzed according to: autonomous motivation, which focuses on the behavior that a person chooses as specific value, and controlled motivation, which focuses on the behavior that a person chooses to avoid punishment or to get a reward.

Numerous studies have shown that autonomous motivation conducive to creative thinking and better health and higher quality the activities. It means that the students will work more creatively with more commitment to the task (Deci & Ryan, 2008; Stone, Deci, & Ryan, 2009). It turns out that two factors make this theory appropriate to explain the students' achievements in the school environment. Firstly, it relates to a certain proficiency in the standards, and secondly – it serves to clarify the quality of human functioning.

Thus, according to the theory of Deci and Ryan, the situational context can influence on the students' experiences and may encourage perseverance. Positive learning outcomes appear when the school environment creates opportunities for students to develop a sense of their own competence and autonomy, as well as to establish positive relationships with others (Deci & Ryan, 1985; Gagne & Deci, 2005). The theory assumed that the higher degree of fulfill psychological needs in the school environment; the higher level of students' engagement will be, as well as the higher level of self-awareness will be (Boekaerst, 2014). In addition, students' responsibilities and involvement in school can influences on the learning process and

the interactions (Connell & Wellborn, 1990). The need of students' self-learning is promoted when they have an experience to support their autonomy. It is associated with students experience and opportunities to participate in decision-making (Reeve & Deci, 1996). Therefore it is emphasized that support students' autonomy could improve their quality of participation in school life and increase the possibility of using the self-regulation strategy.

Describing the subject connected with the students' self-regulation in the school environment it should be clarified the second term-school environment. In the light of theory it includes all institutional, educational and personal factors in school. The literature review also examined the following aspects: 'firstly, the concepts of professional development and school culture, secondly, teachers' professional development: quality and impact, thirdly, school culture and teachers' professional learning and finally, school learning culture' (Hefnawi, 2017, p. 456).

The quality of the student's relationship with teachers is an indicator of deepest understanding the quality of students' functioning in the school environment, also provides information about the level of dysfunctionality (Gryniuk & Tuszyńska-Bogucka, 2004). The considerations in this article have been concentrated just on the area of relationship between students and teachers.

Helping Relationship Theory by Lawrence M. Brammer highlighted the quality of students' functioning in the school environment in the light of humanistic psychology. The students' success depends on the conditions created by the teacher, who supports the students' comprehensive development. Thus, upbringing in education should help the students become a fully functioning person, it means, to support them in developing their own creative potential and tendency to self-realization, independence, awareness, open attitude. The conditions can influence on increase the level of self-learners (Brammer, 1984; Janowska, 2000). A development that takes place in the environment which allows the fulfill needs creates an opportunity to develop the children's skills: selecting appropriate targets and also including the implementation attitudes and behaviors (Porzak, 1994). 'Teachers can foster a responsive learning environment that supports adolescents' evolving cognitive, social, personal, and emotional needs by providing increasingly sophisticated and challenging curriculum, active and relevant instruction, high-quality relationships characterised by care and trust, and opportunities for exploration' (Perera & Hathaway, 2017, p. 293). An important and direct source of information about the quality of conditions supporting students' development is their perception and experience. For that reason, it is important to recognize the quality of teachers' work in students' opinion. The students' roles and their learning process are preceded and connection with teacher's activity (Kuchcińska, 1997; Kozioł, 1994).

Based on the concept of Helping Theory by L. M. Brammer, adapted by the Z.B Gaś

for understanding an educational contact, researchers list five main variables that constitute conditions for the quality of contact with a student: experience of understanding and acceptance, sense of emotional bonds with the tutor, openness, mutual respect but also sense of certain limits in life and development and sharing the responsibility for changing educational process (Brammer, 1984; Gaś, 2006). Only when these conditions are respected, child's development and behavior show the result of specific benefits that are useful for him / her and the society when he / she lives (Wojnar, 2000). 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 direct means of information on development-friendly conditions, whilst their psychosocial functioning is an indirect factor.

But it turns out that some of the school environments can support the process of students' self-regulation more effectively than others. That's why student's perception of school environment has been limited to the assumption that student's quality of functioning 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, which enhance the level of motivation and a sense of autonomy will be a strong predictor of emotional and cognitive engagement, works to promote the comprehensive development and consequently have an impact on students' proper functioning in the school.

3. Methodological Aids

This article consist the research issues: „Is there any correlation between the level of motivation and the level of self-regulation in the school environment". It requires identification:
- Indicators of independent variables-the level of self-regulation and the level of motivation and
- Indicators of dependent variable-the quality of functioning in the school environment.
Psychological publication emphasized that the main indicators of students' self-regulation are self-esteem, the ability to control and change behavior (Baumeister & Vohs, 2004), a sense of autonomy and the degree of satisfaction of basic psychological needs (Deci & Ryan, 2000).
The main indicators of students' motivation are the level of external motivation, autonomy motivation, self-control and self-awareness.
The main indicator of perception school environment is the quality of functioning in the peer relation, in the relation between students and teachers and perceiving the school.

In order to clarify the problems, it was limited to the analysis of selected indicators of self-regulation (autonomous/controlled regulation) and the motivation (autonomous/external)

in the light of SDT while the dependent variable is presented in the area of quality relations with teachers by the conditions supporting students' growth.

It was assumed that the level of student motivation and a sense of autonomy in action are related to the perception of the school environment. Students who have low levels of autonomous motivation and low level of autonomous regulation will have a dysfunctional relationship with teachers.

3.1 Participants

The article shows only the part of the whole research, which took place in a public middle school in Bialystok, in the period from March to May 2014.

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.

3.2 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 (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 theoretical basis of this questionnaire is Deci and Ryan theory;

- Students' Motivation for Learning Questionnaire (KMSG) which is assumed the existence of 4 scales about general students' motivation to learn: self-control, autonomy motivation, external motivation, self-awareness. The theoretical basis of the questionnaire is the concept of motivation by Deci and Ryan.

To determine the quality of functioning in the school environment the following were 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. 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.

3.3 Statistical Power

In the statistical analysis of the data:

- $\chi 2$ 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 23.0 program. The hypotheses were verified at a significance level of 0.05.

4. Results about self-regulation 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 organ systems classes, 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 autonomy self-regulation, I supposed the level of autonomy self-regulation differentiates groups and the students with low level of autonomy self-regulation will have dysfunctional relations with teachers.

The following graph presents the data in the field of autonomy self-regulation in the learning process.

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

Table 1: *Gender and the frequency of the level of self-regulation (SRQ-L)*

Independent variables	content of question	Sex	The mean	Standard	Comparisons between groups		
					t	df	p.i.

				deviation			
Controlled regulation	Because I would get a good grade if I do what he/she suggest	Girls	5,15	1,872	3.029	199	,003
		Boys	4,35	1,857			
	Because it's easier to do what I'm told than to think about it	Girls	4,59	1,810	3.785	199	.002
		Boys	3,65	1,679		199	
	Because I would feel proud if I did continued to improve my skills	Girls	5,02	1,495	2.983	199	,003
		Boys	4,31	1,828		199	
Autonomous regulation	Because I believe my instructor's suggestions will help me to fulfil the school's tasks	Girls	4,64	1,697	3.044	199	.003
		Boys	3,93	1,575		199	
	Because it's important to me to do well at this	Girls	4,99	1,805	3.001	199	.003
		Boys	4,24	1,743		199	
	Because it's interesting to use the interview to try to identify what skills I have	Girls	4,83	1,670	2.277	199	.024
		Boys	4,27	1,770			

Source: Own Research

On the basis of the analysis of the data, it can be stated that the means values of indicators between groups of student are positive and differentiates in a statistically significant way in the context of students' opinion. The results suggest that girls have higher level of self-regulation than boys. It means that girls are able to self-regulate their behavior, to be active, responsible and show self-discipline (Deci & Ryan, 2008). Beside this a group of girls more often than boys declare achieve the academic grades from the teachers' attitude. Differences occur in the area of listening to teachers' suggestions in order to get a good grade, fulfill school tasks, dependance from teacher's attitude (girls declare that it is easier to do what the teacher said, than himself to think about it).

On the other hand, the analysis of responses in the area of self-regulation in the division of the class level should be emphasized. The analysis of the statistically significant results the answer to only one question *'I will participate actively in the organ systems classes, because I feel like it's a good way to improve my skills and my understanding of peers' ($F_{(3, 197)}$ = 5.950, p<0.05).* It means that the field of autonomy regulation differentiates in a statistically significant way the data which focus on the division on class level. 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.

5. Results about motivation in the light of The Theory of Self-Regulation

(Deci, Ryan)

Presented results should be completed in the level of motivation. Filling out the questionnaire, researchers were asked about 34 statements regarding their interests, school behavior and leisure activities, as far as the statement relates to you (how much do you agree with him / her? To what extent do you agree with this statement), on a 5-steps scale (from 5-very to 1-little). Recognizing the opinion of middle school students, I assume that the average level of motivation for learning is different for gender and grade level. Students with low level of motivation for learning will perceived dysfunctional school environment, specifically in the area of dysfunctional relations with teachers.

Table 2: *Gender and the frequency of the level of motivation (KMSG)*

Indicators of motivation	Girls		Boys		Total		Comparisons between groups		
	N = 94	**%**	**N = 106**	**%**	**N = 200**	**%**	t	df	Sig.
external motivation	17	18.1	16	15.1	33	16.5	,585	198	,559
autonomy motivation	29	30.9	36	34.0	65	32.5			
self-control	35	37.2	50	47.2	85	42.4			
self-awareness	13	13.8	4	3.8	17	8.5			
total	94	100.0	106	100.0	200	100.0			
Mean	7.4681		7.3962		-	-			
Std. deviation	.94701		.94701		-	-			

Source: Own Research

On the basis of this analysis, girls have a higher level of self-awareness in the field of motivation for school education, but lower levels of self-control and autonomous motivation. Results are not statistically significant. This may indicate that girls may be less persistent in action, feeling low responsible for results and possible failures. They could dropping responsibilities on others and presenting a dependent attitude.

Both groups received the highest percentage of responses in the area of self-control (boys-42.7, girls-37.2). It means, that boys have to control their impulses in order to behave properly and to concentrate on the content of the lesson more than girls. In the content of theory, which emphasized that high level of self-control is crucial for the regulation of behaviour in related to long-term goals pursued by studying (Mischel & Ayduk, 2002), it should be stated that boys should intensify your level of self-control, in order to selecting appropriate goals and managing time and effort properly (Baumeister et al., 1998). In this way boys will have more positive academic achievement (Tangney, Baumeister, & Boone, 2004). The next table shows the data

in the division on the class level.

Table 3: *The class and the frequency of the level of motivation (KMSG)*

Indicators of motivation	I class		II class		III class		Total		Comparisons between groups
	N = 68	%	N = 69	%	N = 63	%	N = 200	%	
external motivation	6	8.8	15	21.7	12	19.0	33	16.5	F (,496); n.i.
autonomy motivation	26	38.2	15	21.7	24	38.1	65	32.5	
self-control	32	47.1	33	47.8	20	31.7	85	42.4	
self-awareness	4	5.9	6	8.7	7	11.1	17	8.5	
Total	68	100.0	69	100.0	63	100.0	200	100	
Mean	7.5000		7.4348		7.3492		-	-	
Std. deviation	.74313		.93113		.91860		-	-	

Source: Own Research

On the basis of the analysis of table 2 it could be stated that I[st] and IInd grade students achieve the highest data in the field of self-control of motivation. The I[st] and IIIrd grade students achieve the highest data in the field of autonomy motivation.

It turned out that I[st] and IInd grade students are the most persistent in action, the most responsible for the school grade and take responsibility for possible failures. High achievement contributes to their proper functioning in the school environment (Deci & Ryan, 2000).

6. 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 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. I assume that the degree of experience of the conditions is different based on gender and class level.

The following graph presents the means of experience conditions supporting growth in different groups based on gender.

Table 4: *The gender and the means of experience conditions supporting growth*
(The OZ-U Questionnaire)

The criteria of lessons' evaluation	Gender	The mean	Standard deviation	Comparisons between groups		
				t	df	p.i.
The attractiveness of lessons	Girls	3,00	1,227	-,211	200	n.i.
	Boys	3,04	1,294			
Use of time during the lesson	Girls	3,41	1,101	1.786	200	n.i.
	Boys	3,12	1,201			
The student's independence	Girls	3,16	,965	.533	200	n.i.
	Boys	3,08	1,232			
The amount of knowledge	Girls	3,48	1,171	.938	200	n.i.
	Boys	3,31	1,334			
Activity of students	Girls	2,87	1,060	.258	200	n.i.
	Boys	2,83	1,230			
The sense of student's safety	Girls	3,46	1,170	1.552	200	n.i.
	Boys	3,18	1,344			

Source: Own Research

The analysis of this table shows the data no statistically significant, but important because of possibility to compare with the date based on class.

The results suggest that a group of girls more often than boys declare *use of time during the lesson, the students' independence, the amount of knowledge and the sense of students' safety*. It means that girls more often than boys experience the following conditions supporting their growth: sharing the responsibility for changing educational process, sense of certain limits in life and development, experience of understanding and acceptance, openness and the sense of emotional bonds with the tutor (Brammer, 1984).

The next table shows the frequency of experience conditions supporting growth on the basis of class level (The OZ-U questionnaire)

Table 5: *The class level and the frequency of experience conditions supporting growth*

(The OZ-U Questionnaire)

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	200	0.03
	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	200	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	200	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	200	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	200	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	200	0.001
	II class	3.29	1.307			
	III class	2.90	1.329			

Source: Own Research

On the basis of the analysis of table 4 it could be stated that I[st] 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 I[st] 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 I[st] 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 I[st] 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.

To sum up this part of analysis in the area of frequency of students' declaration it should be stated that use of time during the lessons, the amount of knowledge and the sense of students' safety is more higher among the Ist grade students then the IIIrd grade students and is more often experience among the girls then the boys.

Applying the results to the concept of Helping Theory by L. M. Brammer it means that the sense of relation between students and teachers is an important determinant of supporting student's growth. The main result of the study for psychological practice in connection with downward tendency among the years of study in middle school students is to make effort to support students in equal level, except the class.

Is there any statistical differences correlation between the level of self-regulation and the conditions supporting students' growth?

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

Table 6: *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
Autonomous regulation	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	n.i.	n.i.	n.i.	n.i.	.220 p<0.002, N=20	.177 p<0.012 N=20	n.i.

	work interpersonally with students					0	0	
Controlled regulation	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 numerous of 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. Than students organize their behavioral regulation by taking reflective interest in possibilities and choices. Students, who have a high level of controlled regulation focus on avoid punishment or to get a reward.

Referring to the theory of self-regulation (Deci & Ryan, 2000), in which I emphasized that autonomous attitude in teaching promotes school involvement, behavioral responsibility and a sense of personal satisfaction (Reeve, Nix, & Hamm, 1999; Roeser, Eccles & Sameroff, 1998), saying that students with high level of self-regulation will have a high level of sense of certain limits in live and development, openness in mutual relation, sense of understanding and acceptance and sense of emotional bonds with the tutor. Students who experience this conditions supporting growth will present conventional relations with teachers and it means that they will be able to self-regulate their behavior, be active, determined and show self-discipline (Deci & Ryan, 2008). In contrast, past studies shows connection between controlled regulation and lower level of self-esteem and self-actualization. It means, that student with high level of controlled regulation could experience anxiety, disorientation and they are more oriented to avoiding failure (Deci & Ryan, 1985; Koestner et al., 1992; Williams & Deci, 1996). They have dysfunctional relationships with teachers in decision-making related to tasks and school life (Roeser et al., 1998), they may express a low level of school involvement, responsibility for their own behavior and responsibility for learning (Reeve et al., 1999).

In summarizing the analysis of the presented results, it should be considered that the boys who posses a low sense of autonomy could perceived the school environment in the dysfunctional view. While the girls are the group of dependent students from teachers' attitude

and decision. The boys can show low school commitment, while girls have high levels of dependence.

How are the results of correlation between the level of the level of self-regulation and the level of motivation?

The Pearson's Correlation shows statistically significant correlation between the level of motivation and controlled regulation. It turned out that I[st] grade students declare controlled regulation (r=-.229; p<0.05) much more often than IIIrd grade students.

The following consideration shows correlation between the level of motivation and the level of self-regulation on the basis of gender (Independent Sample Test) and the class level (ANOVA).

Table 7: *Independent sample test between different dimensions: the level of motivation and the level of self-regulation*

Independent variable	Controlled variables	Self-Regulation Questionnaire			
		Autonomous regulation		Controlled regulation	
		Because I feel like...	Because learning...	Because I would get...	Because it's easier...
Internal motivation	gender	t = 2.095; p<0,040	n.i.	n.i.	t = 2.185; p<0.33
	class level	n.i.	n.i.	n.i.	n.i.
External motivation	gender	n.i.	n.i.	t = 2.198; p< 0.036	t = 2.434; p<0,021
	class level	F = 6.621; p<0.004	n.i.	n.i.	F = 7.904; p<0.002

Because I feel like... - I will participate actively in the class system because I feel like it's a good way to improve my skills and my understanding of students
Because learning... - I will participate actively in the class system because learn into interview well is an important part of becoming a student
Because I would...- I will participate actively in the class system because I would deal bad about myself if I didn't study this approach
Because I would get... - I am likely to follow my teacher's suggestions for interviewing, because I would get a good grade if I do what he/she suggests
Because it's easier... - I am likely to follow my teacher's suggestions for interviewing, because it's easier to do what I'm told than to think about it

Source: Own Research

The data in the table above shows the correlation between the level of self-regulation and the level of motivation. The analysis shows statistically significant data in the field of internal and external motivation as well as autonomous and controlled regulation, for the gender as controlled variables. The boys have a higher level of internal and external motivation than the girls and the higher level of motivation the higher level of autonomous and controlled

regulation will be.

The correlation between external motivation and regulation on the basis of class level shows that the higher level of external motivation, the higher level of self-regulation will be.

How are the results of correlation between the level of motivation and the conditions supporting students' growth?

To show full results of the undertaken research there must also be presented data gathered by correlation between variables formulated in the article.

Correlation between different dimensions: the level of motivation and the gender show statistically significant data (r=-0.42, p<0,05). It means that the boys have low level of motivation than the girls.

The correlation between the level of motivation and the level of class show no statistically significant data. However, the results show the following dependence: the lower class level, the higher the motivation will be. It means that the students in the first class, who just start yours school are more motivated than the students in the third grade who finish yours middle school.

Correlation between the external motivation (KMS) and the conditions supporting students' growth (OZ-U) shows statistically significant results in the area of the level of the sense of certain limits in life and development (F=6.321; p<0.05); IIIrd grade students who have *external level of motivation* in statistically significant way declare that they know the school degree criteria more than Ist grade students. Also the data in the field of *openness in relation* shows statistically significant results. The IIIrd grade students who have *external level of motivation* declares yours higher level of activities during the lessons than the Ist grade students (F=7.670; p<0.05).

The results obtained in the *group of students with a high level of internal motivation* show a statistically significant dependence on the following conditions supporting students' growth. It turned out in the light of declaration, that *sharing the responsibility for changing the educational process* increase the interest of the school subjects (F = 3.581; p <0.05), increase the attractiveness of lessons (F = 7,209, p <0.05) and increases the amount of knowledge transferred by the teachers (F = 10.781; p < 0.05). The researches show the increasing tendency in IIIrd class students' activity (F=7.442; p<0.05).

Applying the results to the theoretical considerations it means that girls have a higher level of controlled motivation than boys. It could be very interesting when we highlight that just girls could teach the next generation (taking into account the feminization of the teaching

profession).

7. Concluding remarks and practical implications in the field of self-regulation

Girls have higher level of self-regulation than boys, beside this girls and boys have external regulation; girls can present high level of dependence from the teachers' attitude, while boys show low level of school engagement.

Implication for the results can be found in the Kuhl theory (Frohlich & Kuhl, 2003; Kuhl & Furmann, 1998), which assumes that dependence on teachers' attitude is related to self-control rather than self-regulation.

In other words, it can be assumed that girls will tend to achieve the goals in connection with teachers' needs / expectation. Moreover, the boys are also focused on the pursuit of teachers' goals, but they presence low level of engaged in school life.

Referring to The Self-Determination Theory (Deci & Ryan, 2000), it means that both groups do not experience their sense of autonomous regulation (Roeser et al., 1998), which may generate irresponsible attitude and lack of maturity for their functioning in school environment (Reeve et al., 1999).

8. Concluding remarks and practical implications in the field of motivation

On the other hand, the data shows that boys have a higher level of internal motivation than girls and the higher level of motivation the higher level of autonomous and controlled regulation will be. The correlation between external motivation and regulation on the basis of class level shows that the higher level of external motivation, the higher level of self-regulation will be.

The data also shows that boys should concentrate on the content of the lesson more than girls. It means, that girls should strengthen hers level of autonomous motivation, in order to better known selecting appropriate goals as internal goals and managing time and effort properly (Baumeister et al., 1998). In this way girls will have more positive academic achievement (Tangney et al., 2004).

In practical implication teacher should recognize the level of students' motivation. These skills will allow teachers to plan their lesson in the way more clearly present the aware of what they are learning so they can put on long-term goals and have an internal motivation to take action in the school environment.

9. Concluding remarks and practical implications in the field of conditions supporting students' growth

The results obtained in the group of students with high level of internal motivation show a statistically significant correlation with the following conditions supporting students' growth: *sharing the responsibility for changing educational process, sense of certain limits in life and development, openness in relationships, understanding and acceptance, sense of emotional bonds with the tutor.*

The results suggest that girls are more interested in the subject then boys, they experience respect and *acceptance with the tutor* and more often feel safe during the educational process then boys. The boys, on the other hand, perceive higher attractiveness of lessons then girls, are more independent than the girls, but most boys declare low activity during the lesson's process, and are most dissatisfied with the activities.

10. Scope of Future Research

It is worth to deeply recognize this project in the ares of upbringing style in order to find the correlation between the teachers / parents' type of control (self-control / self-regulation) and the process of development child predisposition to internal self-regulation. Previous studies have shown that the parents' concentration in supporting children's development and strengthening of positive outcomes conducive development of autonomous regulation with the associated features such as: intelligence, wisdom, creativity, initiative and courage. On the other hand, the parents / teachers' concentration on failure and prevention of failure conducive to the development of controlled regulation based on pressure and related features such as: diligence, systematization, perseverance, strong desire, carefulness. In the view of the results obtained with the strongest external motivation and autonomous or controlled regulation, the further research in this direction seems to be interesting.

11. Summary

In the current study, I examined the correlation between the level students' motivation and self-regulation and their quality of functioning in the school environment. The aim of these considerations assumed developing the conclusions in the field of practical action, which should be taken to create and increase the students' level of self-regulation at school. The practical aim of this consideration was to draw conclusions about the actions that need to be taken to achieve and increase the level of students' self-regulation in the school environment. The results of my own research indicate that teachers should enhance boys' engage of school live and increase girls' autonomy related with students' tasks. It is important to strengthen girls'

inner motivation for learning. In addition, it should be emphasized that it is relevant to intensify the sense of emotional bonds with teacher. It means that pupils need to experience the conditions supporting their growth in the high level, especially: sharing responsibility for changing educational process, sense of certain limits in life and development, openness in relationships, understanding and acceptance, sense of emotional bonds with the tutor. Continue this study in self-regulation process may reduce the dysfunctional behavior in the school environment by planning more effective and preventive interventions.

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