

**"BABEȘ-BOLYAI" UNIVERSITY OF CLUJ-NAPOCA**  
**FACULTY OF PSYCHOLOGY AND EDUCATIONAL SCIENCES**

**Ph.D. THESIS**  
**Aggressivity among pupils**  
**(Summary)**

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**Key words:** school aggressivity, bullying, victimization, prosocial behavior, social and emotional wellbeing, psycho-social adaptation, social and emotional skills, prevention program

## Introduction

The present thesis with the title "Aggressive behavior in pupils" targets the study of the nature and amplitude of the bullying behavior - which is a specific form of school violence - in middle-school pupils from Cluj-Napoca, considering gender and schooling differences. The absence of prevention and control programs of this specific type of behavior in schools may affect the socio and emotional wellbeing of aggressors and victims, as well as their psycho-social adaptation. Thus, *The Anti-Aggressivity Pupil Program* based on developing the social and emotional skills of students through school and family factors was implemented. The goal of this program is to improve the socio-emotional wellbeing of students in order to reduce the frequency of violent manifestations, victimization, and to increase the frequency of prosocial behavior.

# CHAPTER I.

## PSYCHOLOGY OF AGGRESSIVITY - BIBLIOGRAPHICAL SYNTHESIS

### 1.1. Conceptual boundaries - aggressivity, aggression, violence

The study of human aggressivity is not a facile domain to study, the main difficulty laying in the heterogenous nature of the term (Ramirez, 2000).

If in the common, daily usage the terms aggressivity-aggression, violence seem to hold almost the same meaning, in this subchapter we have proposed to underline the differences between the aforementioned notions according with scholarly literature in the field.

Some authors consider that aggressivity is situated at dispositional levels, being the tension that puts the body in motion until the motivation of the behavioral act will be diminished or satisfied (Doron & Parot 1999).

"Aggression means the transit from potentiality to act, the act being defined as a type of behavior that targets the partial or total destruction of an object or injuring a person" (Preda, 1998, p.38).

The notion of violence refers to an aggressive act characterized especially by the usage of brute, physical force, representing one of the major forms of manifesting aggressivity. (Preda, 1998; Florea, 2003).

### 1.2. Etiology of aggressive behavior

Alongside the succinct presentation of the main theoretical models (theories that consider aggressivity as being innate; as being a feedback on frustration; as being a learned social behavior; cognitive theory) which have tried to exhaustively explain aggressive behavior on the basis of one theory of implicated factors, minimizing or even omit the influence of other factors, in this chapter we have underlined the contribution brought by each theory on the general understanding of aggressivity and also, highlighting the multicausal approach of aggressive behavior.

#### 1.2.1. Theories - aggressivity is innate

**a) Instinctual theories** - consider that aggressivity is a manifestation of an impulse or inborn instinct (Moser, 1987). Representing the two instinctual currents are Sigmund Freud - *psychoanalytic approach* and Konrad Lorentz - *ethological theory*.

#### **b) Neurobiological, genetic, hormonal and biochemical theories**

Behavioral neurobiology tries to establish the existence of a connection between the neurophysiologic mechanisms and certain processes or behavioral phenomena. The main promoter of the **neurobiological theory**, Moyer (apud Eisikowitz, 1999) presented a scheme of the physiological processes that determine aggressivity, which apply both to humans and animals. Also, the existence of some factors that have an important role in distinct cerebral mechanisms which trigger aggressive behavior has been shown (positive and negative reinforcement systems, which cerebrally correspond to centers from the lateral hypothalamus or from the mesencephalon's medial tegmentum, respectively areas from the medial hypothalamus and amygdala, while a secondary factor is given by the unspecific emotional response which implicates the septal nuclei and olfactory bulbs (Karli, 1991).

Among the first **genetical conceptions** that refer aggressivity was Lombroso's "*Theory of a Born Criminal*" (Berkowitz, 1993). According to this theory, the personality of the delinquent represents a specific and distinct entity (named "criminal personality"), certain anatomical, physiological and biological structures being hereditary, and determine the predisposition of certain individuals toward crime.

Studies carried on twins have demonstrated the presence of a hereditary component in the manifestation of aggressive behavior (Hollin, 1989). Furthermore, the importance of heredity was studied in the familial context, for example, the study of Mednick and Hutchings (1978), and by Brodski and Sheley (apud Buş, 1997) in the context of chromosomal anomalies. These studies have concluded that the genetic material and the presence of Klinefelter Syndrome represent a predisposition and not a prerequisite for committing a crime.

Some researches have been focused on the connection between aggressivity and **hormonal factors**, like the study of Reinisch and Sanders (1982), while other studies pertaining to Lang, Goeckner, Adesso and Marlatt (1975); Stele and Josep, (1990) have followed the relationship between aggressivity and different **biochemical markers** (alcohol in blood).

### **1.2.2. Theories - aggressivity is a response to frustration**

According to *reactive theories*, aggressive behavior is a reaction to frustrating, disagreeable situations (Moser, 1987). In pursuance of Freud's theory, when the manifestation of instincts is frustrated an aggressive impulse is induced. This theory was later taken over by other researchers affiliated to Yale University from the U.S.A. According to this "the apparition of aggressive behavior implies the existence of frustration" and "the existence of frustration leads to certain forms of aggression" (Dollard, Doob, Miller, Cositoare & Sears apud Berkowitz, 1989).

An important contribution that is referring to the relationship between frustration and aggressivity was brought by Berkowitz, which emphasizes the role of situational stimuli in triggering certain aggressive behaviors and the fact that a stimulus associated before with an aggression can function as an incentive to aggressivity in the absence of a frustration (Berkowitz, 1989).

Based on the results obtained from the researches regarding the relationship between frustration and aggressivity which developed over time, researchers consider that in the frame of this relationship "we must take into account the affective and moral maturity/immaturity of the person and the tolerance level of frustration determined, among others, by nature and temperament, education and life experiences" (Preda, 1998 p.46).

### **1.2.3. Theories - aggressivity is a learned social behavior**

*The Social Learning Theory* is connected especially to A. Bandura's name, which finds its origin in the behavioral studies on animal learning, and it refers to human social interactions, in the same time being focused on behavioral patterns which humans develop as a response to the situations created by the environment (Atkinson et al. 2002).

The social learning theory highlights the role of models in the transmission of specific behaviors and emotional responses (Bandura, 1973).

This theory is confirmed by other studies that have indicated the fact that aggressivity, like other responses, can be learned through mimicry (Eron, 1987), moreover, aggressivity

being susceptible to strengthening the adequate stimuli, like any learned response (Patterson, Littman and Bricker, 1967).

#### **1.2.4. Cognitive theory**

This approach underlines the implication of internal cognitive processes inserted between stimuli and the behavioral response of the individual, at the same time considering aggressive behavior the decision to act aggressively is taken according to the presumed benefits and losses (Moser, 1987).

#### **1.2.5. Multicausal approach of aggressive behavior**

Numerous researchers highlight the multiple, biological, psychological and social determination of the aggressivity phenomenon (Bateson, 1980; Eibl-Eibesfeldt, 1995; Geen, 1990; Preda, 1998).

## **CHAPTER II**

### **CHARACTERISTICS OF AGGRESSIVE MANIFESTATIONS IN PUPILS**

Aggressivity in school is an extremely complex phenomena because of its array of forms, causes, and other specific aspects that have made the object of numerous field studies from diverse domains like: psychology, pedagogy, sociology etc.

#### **2.1. School violence - form of manifestation of aggressivity in school**

Violence is a form of manifestation of aggressivity present in the school environment worldwide. A World Health Organization (WHO) study performed in 38 countries from Europe, Israel and U.S.A. regarding behaviors which present a health risk for children and teenagers showed that there are major trans-national differences in what concerns the prevalence of physical violence among students (Currie et al., 2008). In our country, results of the study have shown that the frequency of physical violence recorded values between 15% for 15 year old children and 19% for children aged 11-13 years old.

Aggressive manifestations can be associated with other behaviors that pose a health risk, such as: alcohol-drug consumption, high-risk sexual behavior, aggressivity-self aggressivity (suicidal behavior), high-risk eating behavior (insufficient or excessive food intake), reduced physical activity (sedentary behavior) (CDC, 1990).

The goal of a survey employed on 4950 high-school students from four distinct geographical areas from Romania (Banat, Moldova, Muntenia and Transylvania) was to create a hierarchy concerning the behavioral risk scores of Romanian pupils and establishing the area with the highest behavioral risk on national level. The conclusion of the study demonstrated that aggressivity was differentiated as gravity, followed by sedentariness, alcohol consumption, sexual behavior, smoking, drug consumption (Mireștean, Irimie, Samoilă, Beldean-Galea & Decanovici, 2011). Despite the fact that the results of this study have demonstrated that smoking and drug consumption hold the 5th and 6th rank in what concerns the gravity among other health risk behaviors, smoking in Romania's youth represent an important issue, being considered the most socially accepted (Irimie, Mireștean, Samoilă, Beldean-Galea & Decanovici, 2010), and approximately 1.13% of high-school students from Romania have tried drugs once or twice in their lifetime (Mireștean, Irimie, Samoilă, Pop & Beldean-Galea, 2003a; Mireștean et al., 2002).

Under the label "violence", there can be identified an array of conduit forms - low intensity violence, but also high intensity violence (Neamțu, 2003).

Anghel, Liiceanu, Săucan and Voinea (2006) specify that currently a broad definition of school violence is accepted, including not only delinquency, but also actions that elude the judiciary.

Leaving aside these aspects and the vast diversity of behaviors that can pertain to school violence, we specify that *bullying* can be considered a form of this type of violence as well.

According to Olweus (1991) this type of behavior is defined as:

„A student is being bullied or victimized when he or she is exposed, repeatedly and over time, to negative action on the part of one or more other students” (p. 411).

On the basis of the frame of aggressivity through language outlined by Constantin Păunescu, authors like Hăvârneanu and Amorăriței (2001) present forms of aggressivity through language, such as: slander, disparagement, self-disparagement, irony and sarcasm.

Another classification of aggressive behaviors in school is realized by Herbert (1991) which takes into consideration more criteria - the aggression plan, verbal/physical, openness degree, direct/indirect, and the type of aggressor involvement, active/passive.

A typology of the students' aggressivity manifestation towards their professors is presented by Dedarbieux (1991), who has identified the following forms: noise, the refusal of the student to complete a task expressed by - sabotage, negativity, passive resistance etc; unauthorized getting in and out of class.

These forms of aggressivity manifestations are generated by multiple causes and influence factors.

## **2.2. Etiology of aggressive manifestations**

In explaining the etiology of deviant behavior it is very important to establish the influence of the causes in order to mark the main and secondary roles, also to distinguish between causes and conditions (Preda, 1998).

Balica and colaborators (2006) states that the occurrence of violent events can take into account the biological causes, sociological and psychological.

Some studies have demonstrated that teenagers' personality disorders are associated with violence and criminal behavior during teenage and adult age (Edwards, Scott, Yarvis, Paizis & Panizzon, 2003; Johnson et al., 2000). Among other studies those of Carey, Walker, Rossouw, Seedat & Stein (2008); Molnar, Berkman & Buka (2001) have showed that physical abuse within the family represents a risk factor concerning child development.

A study employed by Mireștean, Irimie, Samoilă, Pop and Beldean-Galea (2003b) on gymnasium and high-school children in Romania showed that it must be taken into consideration the fact that the immediate effects of physical abuse in the family are predominantly psychological and lead to abnormalities on the affect. On long term the chances of social integration of the child are reduced giving way to deviant behaviors.

Adding to the multiple causes and factors responsible of aggressive behavior, violence on TV represents an important factor in the emergence of this type of behavior (Berkowitz, 1974; Eron & Huesman, 1987; Ramirez, 2012b).

### 2.3. Prevention and intervention strategies

According to Roşan (2009) prevention of school violence is efficient if "the whole school" approach is applied. This assumes the involvement of teachers, students and parents in the organization and development of the school environment, as well as establishing the key role played by each group.

Prevention of school violence is realized on three levels: *primary prevention* (proactive strategies); *secondary prevention* (reactive interventions); *tertiary prevention* or curative prevention.

Following a survey of students at a school in Romania showed that the priority areas of intervention to improve psychosocial environment are: the developmental creative activities, support cooperation and active learning, providing a friendly atmosphere encouraging and rewarding (Irimie, Mireştean, Samoila, Decanovici & Beldean-Galea, 2011).

## CHAPTER III BULLYING BEHAVIOR IN PUPILS

### 3.1. Defining "bullying"

The interest taken in studying the bullying phenomenon in school has led to the necessity of defining it. Diverse studies have come up with different definitions with the purpose of properly describing bullying.

Olweus is considered to be a pioneer in regards to studies that refer to bullying.

The most used definition of "bullying" in field literature is the one that pertains to Olweus (1997), which establishes that:

bullying is thus characterized by the following three criteria:

- (1) it is aggressive behavior or intentional 'harmdoing'
- (2) which is carried out repeatedly and over time
- (3) in an interpersonal relationship characterized by an imbalance of power.

One might add that the bullying behavior often occurs without apparent provocation, and negative actions can be carried out by physical contact, by words, or in other ways, such as making faces or mean gestures, and intentional exclusion from a group. (pp.10-11)

Increased research interest pertaining to this domain has led to the identification of several forms which can include varied behaviors all reunited under the bullying frame.

Proceeding from the basic forms of bullying presented by Olweus (1993) and Rigby (1996), Limber (2002) has realized a classification model of the most encountered bullying behaviors in pupils.

- **Verbal bullying:** taunting, teasing, name-calling (*direct bullying*) and spreading rumours (*indirect bullying*)
- **Physical bullying:** Hitting, kicking, shoving, destruction or theft of property (*direct bullying*) and enlisting a friend to assault someone for you (*indirect bullying*)
- **Non-verbal/Non-physical bullying:** Threatening (*direct bullying*) and excluding others from a group, obscene gestures, manipulation of friendships, threatening e-mail (*indirect bullying*)



## **3.2. Prevalency of bullying**

### **3.2.1. Bullying in school - an international issue**

School bullying is a fact occurring in many countries (Carney & Merrell, 2001). According to a study conducted by Currie on child health in 27 countries, the majority of the 13-year-olds in most of the countries have been involved in bullying behaviours at least once (Krug et al., 2002).

### **3.2.2. Gender and age differences**

The frequency of bullying and victimization vary depending on gender and age.

Baldry and Farrington (1999); Genta, Menesini, Fonzi, Costabile and Smith (1996); Nansel and collaborators (2001); Scheithauer, Hayer, Petermann and Jugert (2006) show that, according to the students' self-reports, boys are more likely than girls to bully other students.

Studies conducted on victimization provided varied results: Nansel and collaborators (2001) indicated that the rate of victimization is greater among boys, other studies like those of Genta and collaborators (1996), Scheithauer et al., (2006) did not find any statistically significant difference, while Baldry and Farrington (1999) found that the victimization rate was greater among girls, although the differences came near the statistical significance.

Contrasting with the aforementioned results a study conducted on Romanian pupils (Beldean-Galea, Jurcău & Țigan, 2010) demonstrated that girls manifested bullying more frequent than boys, but regarding victimization there were no gender differences. Moreover, girls than boys used more frequently as both indirect and physical bullying type to aggress (Beldean-Galea, Dobrea & Stan, 2012).

When it comes to age, studies have found that the frequency of bullying and victimization decreases as children reach higher school grades (Genta et al., 1996; Nansel et al., 2001), nonetheless, results of another study have indicated an increase in bullying from lower school levels to higher levels (Scheithauer et al., 2006).

### **3.2.3. Bullying in urban, suburban and rural communities**

A study conducted in U.S.A. has showed that in rural areas the frequency of bullying was up to 3-5% higher than in urban or suburban areas (Nansel et al., 2001).

## **3.3. Characteristics of individuals implicated in bullying**

### **3.3.1. Aggressors**

Some studies indicated that *bullies* are at a greater risk for psychiatric disorders as compared to the students not involved in this type of behavior (Kumpulainen, Rasanen & Puura, 2001; Kaltiala-Heino, Rimpela, Rantanen & Rimpela, 2000). Bullies are at a greater risk for suicidal ideation even compared to victims and bully-victims (Kaltiala-Heino, Rimpela, Marttunen, Rimpela, & Rantanen, 1999). Nansel et al., (2001) showed that this category of students may have smoking and drinking problems, and they may even commit acts of vandalism, theft and truancy (Rigby & Cox, 1996). Other studies have demonstrated the increased risk of bullies to suffer from psychosomatic problems like tantrums, tenseness and irritability, difficulty in falling asleep and waking up, pain in the neck and shoulders, headaches and exhaustion, lower-back pain, abdominal pain, compared to the victims and the students not involved in bullying (Williams, Chambers, Logan, & Robinson, 1996).

### **3.3.2. Victims (passive and aggressive)**

*The victims of bullying* represent the category of students who are bullied by some of their peers, but who do not bully others. The victims are at a greater risk for mental disorders compared to those who are not involved in bullying. Most studies suggest that victimization positively correlates with some internalizing problems like anxiety, depression, suicidal ideation, according to the study conducted by Kaltiala-Heino et al. (1999) and by Kaltiala-Heino et al., (2000) and with other problems like the attention deficit disorder (Kumpulainen et al., 2001).

Nansel et al. (2001) have thus shown that the victims of bullying display lower abilities in social and emotional adjustment, increased difficulties in making friends, fewer relations with their peers and more loneliness. Being a victim positively correlates with indiscipline the same way bullying does (Haynie, Nansel, & Eitel, 2001). The victims display: chronic absenteeism, poor school performance (Beale, 2001); psychosomatic symptoms - headaches, abdominal pain (Beale, 2001; Williams et al., 1996); sleep disorders, nocturnal enuresis (Williams et al., 1996).

*The bully-victims* represent the category of students who are bullied by some of their peers but who bully others themselves. The bully-victims display the poorest psychosocial functioning, being at a high risk for behavior problems, low self-control and social competence, poorer school performance than that of bullies and victims (Haynie et al., 2001; Nansel et al., 2001).

Also, this category presents: mental health problems, anxiety, psychosomatic symptoms, eating disorders (Kaltiala-Heino et al., 2000); signs of depression (Kaltiala-Heino et al., 2000; Haynie et al., 2001). Furthermore, bully-victims are part of a deviant group and are less capable of developing positive relationships with their peers (Haynie et al., 2001).

### **3.4. Prevention and intervention measures**

Numerous programs have been implemented in schools to improve upon bullying. These programs have been evaluated in different countries and under different conditions. Still, certain difficulties exist in specifying what are the most efficient programs for schools (from countries that did not implement such programs) because of the social and cultural differences between countries.

Limber (2002) states that in order to change the school climate and behavioral norms the most efficient and encompassing strategies are those that involve the whole school. Olweus's bullying prevention program is the most documented program and is implemented in a few hundred schools worldwide (Limber, 2002).

On the basis of this program, Stevens, De Bourdeaudhuij and Van Oost (2000) have developed The Intervention Program in Flemish Schools. The program includes:

- intervention activities - for parents and teachers, as an action at school level.
- activities for colleague groups as action at classroom level.
- curriculum activities for pupil groups.
- individual activities focused on aggressor and victim pupils.

After applying the program bullying frequency has declined for the lower grades, but not for upper grades.

Other developed programs which had as a foundation Olweus's program were DEF Sheffield Bullying Project (Sharp & Smith, 1991); Anti-bullying Intervention in Toronto

Schools (Pepler, Craig, Ziegler, & Charach, 1994); The Flemish Anti-bullying Project (Stevens, De Bourdeaudhuij, & Va Oost, 2001); *Bullybusters Project* (Davis, 2002).

## CHAPTER IV

### STUDIES REFERING TO PUPILS AGRRESIVE MANIFESTATIONS

#### 4.1. Definitions

Considering the conceptual limitations that refer to aggressivity, aggression, violence (see chapter 1.1.) in this thesis the following definitions will be employed:

- *Aggressive behavior* - any type of physical or symbolic behavior meant to injure a person.
- *Violence* - acute aggressive conduct, characterized especially by the use of force; a major form of manifesting aggressivity.
- *School violence* - besides aggressive behavior it includes other types of violent behavior such as:
  - name-calling, teasing, taunting, mimicking,
  - threatening, harassment,
  - shoving, hitting, kicking,
  - behaviors that fall under the law (eg. sexual abuse, carrying a weapon, theft);
  - vandalism - causing intentional prejudices.

Although the term "bullying" tends to be adopted in the field language (Neamțu, 2003, p.220) in the studies presented in the current paper as a correspondent for the aforementioned term, we have employed in Romanian language the phrase "*comportament agresiv-abuziv-repetitiv*".

- *Bullying* - specific form of violence which encompasses all manifestations of aggressivity (verbal, physical, psychological) in which there is an imbalance of power and that are recurrent.
- *Prosocial behavior* - "intentional behavior realized outside of professional obligations, oriented towards sustaining, protecting and promoting social values, encompassing varied phenomena, like helping others, protecting property, self-sacrifice for justice or for the country's independence. Helping, protecting and supporting others is an important pillar in prosocial behaviors, the human being representing the supreme social value" (Chelcea, 1996, p. 445).

#### 4.2. Motivation of the research paper. Why bullying in gymnasium students?

- Because statistically speaking violence is the most frequent form of deviant behavior in schools.
- Because being involved in bullying (as a victim or aggressor) during childhood can have short and long term (adult age) negative consequences if no prevention or control measures are taken.
- Because aggressive behavior can perpetuate from parent to child, so the risk of a vicious circle in which the adult who was aggressive during childhood will have

children that tend to become aggressors will increase without proper prevention and control strategies applied early in school.

- Because up until now in Romania few studies were conducted targeting the bullying phenomenon in pupils, this type of behavior being less known.

#### **4.3. Succinct presentation of general goals of the studies and steps of research**

**The general goal** of this thesis is about realization and evaluation of the efficiency of a primary prevention program of violent manifestations in middle-schools.

This objective imposed first the achievement of several studies before the implementation of the program. These are presented in the following section.

##### **Study 1 - The study of psychometric qualities of The Student Self-report Questionnaire on bullying in gymnasium students within the age of 11-14 years old, made by Stevens, de Bourdeaudhuij and Van Oost (2000)**

*General goal of the study*

- ✚ Evaluation of psychometric qualities of a questionnaire regarding the bullying phenomenon in pupils, adapted in Romanian

##### **Study 2 - A pilot study on the incidence, type of aggressive manifestations and traits of students involved in aggressive acts in school**

*General goal of the study*

- ✚ Identification of the safety degree in schools, frequency and types of aggressive manifestations, traits of the students with aggressive behavior, factors that cause feelings of safety or insecurity, as well as the time and place when violent incidents happen at two middle-schools in the city of Cluj-Napoca.

##### **Study 3 - Study referring to social and emotional wellbeing and psycho-social adjustment of bullying aggressor students and their victims**

*General goal of the study*

- ✚ Evaluation of certain aspects regarding socio-emotional wellbeing and psychosocial adjustment associated with bullying and victimization in two middle-schools in the city of Cluj-Napoca.

##### **Study 4 - Efficacy study of a primary intervention program in school violence**

*General goal of the study*

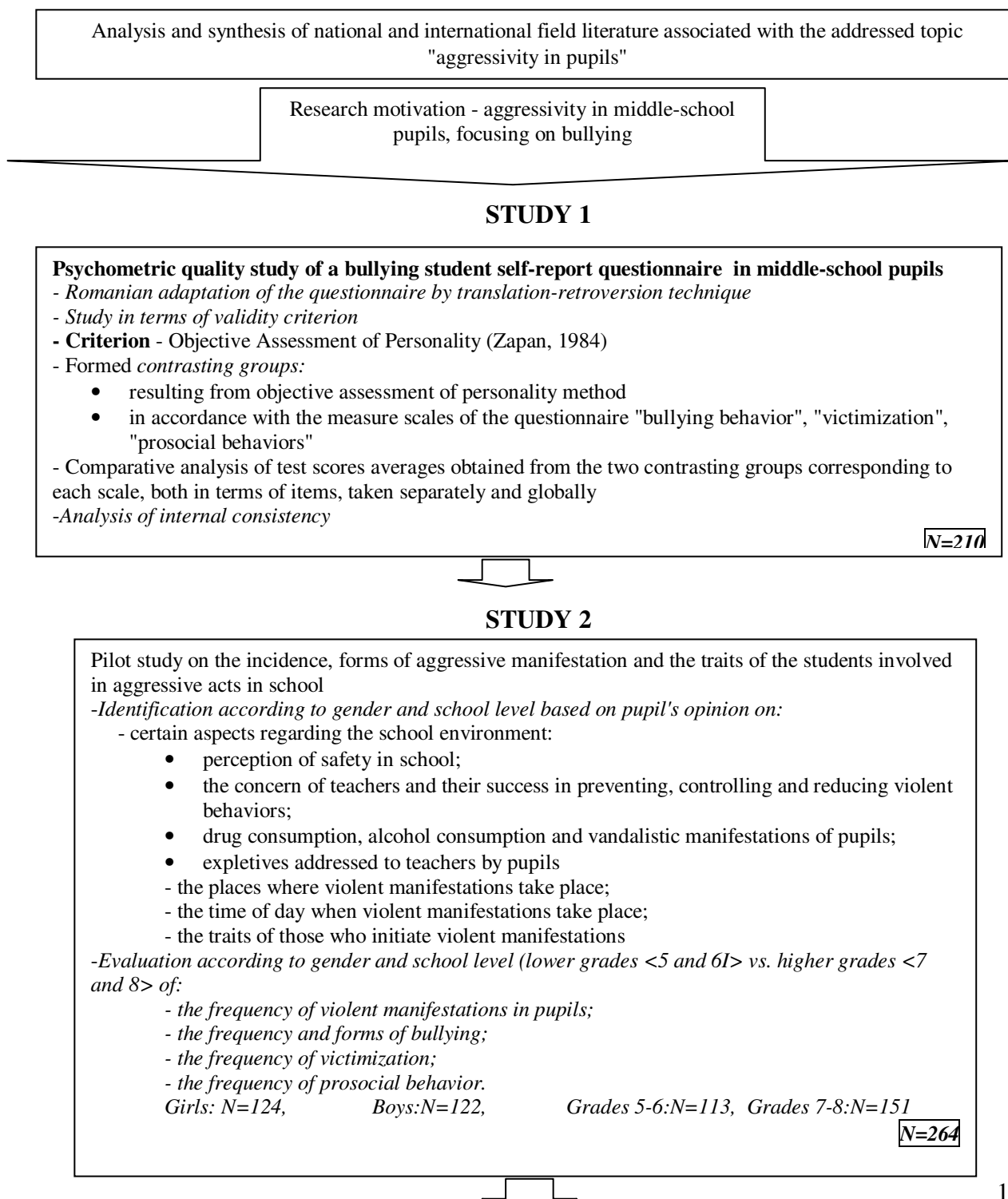
- ✚ Evaluation of the efficacy of an anti-aggressivity program in middle-school pupils (Anti-aggressivity program in school) based on developing social and emotional abilities with the goal to improve socio-emotional wellbeing (aggressors, victims), reducing the frequency of violent manifestations, bullying, victimization and in the same time increasing the frequency of prosocial behaviors.

We mention that:

- Study 1 was conducted at a different time and in distinct schools than studies 2,3 and 4.
- The last three studies were conducted on the same group of subjects and the information obtained from the questionnaires were organized differently in the study.
- The period and distribution of the group of subjects according to the goals is specified in the "research methodology" in the section of each study.

The organization and structuring of the studies conducted in this paper is presented in Figure 2.

**Figure 2.** The structure of the research studies



### STUDY 3

#### Study regarding social and emotional wellbeing and the psychosocial adjustment of "bullying pupils" and their victims

-Classification of pupils from the studied group according to bullying and victimization in the following categories:

- uninvolved or scarcely involved pupils in bullying;
- bully pupils;
- victim pupils;
- bully-victim pupils.
- The relationship between:
  - bullying; victimization; bullying/victimization and
  - school abilities, social abilities, psychosocial adjustment (internalizing and externalizing problems) according to the teachers, parents and students evaluation
  - indicators of social and emotional wellbeing (behavioral, social, emotional, educational); external factors - community, family, school and internal factors - social-emotional, contributing to socio-emotional wellbeing.

Bullies: N=31

Victims: N=47

Bullies/victims: N=26

Uninvolved: N=160

**N=264**

Requirement of implementing strategies of prevention and reduction of violent manifestation, victimization and in the same time increasing prosocial behavior in school.

### STUDY 4

#### Efficiency study of a primary violence prevention program in school

- Using of a set of adapted lessons pertaining to Bernard's "Program Achieve. You can do it" (2008).
- Elaboration of informational materials for parents: **Parent's journal** brochure and **"Assertiveness - middle ground between aggressivity and passivity"** leaflet for pupils
- Implementation of The Anti-aggressivity Program for pupils at a gymnasium in Cluj-Napoca city
  - Design of the research
    - quasi-experimental type of group pre-posttest nonequivalent
    - global evaluation of the program
      - dependent variables - social and emotional wellbeing, degree of violent manifestations, degree of bullying, victimization and prosocial behavior;
      - independent variables - The Anti-aggressivity Program in pupils (developing social and emotional abilities in pupils)
    - conditions:
      - a. applying The Anti-aggressivity Program at a whole school level (condition imposed by the bullying behavior) - *experimental group*
      - b. control - The Anti-aggressivity Program was not applied at the whole school level - *control group*
  - Procedure
    - Step 1. Pre-test (Conducting a *resemblance study* between the two schools (experimental and control groups) regarding the school environment, frequency and forms of violent manifestations - condition imposed by the present research - quasi-experimental type of group pre-posttest nonequivalent
    - Step 2. Implementation of The Anti-aggressivity Program at the experimental school
    - Step 3. Post-test phase (evaluation of the experimental and control group regarding mentioned independent variables)

Experimental group: N=122

Control group: N=142

**Total: N=264**

The studies are detailed in the following.

#### **4.4. Study 1 - Study of psychometric qualities of the bullying phenomenon questionnaire in gymnasium pupils**

##### **4.4.1. Succinct theoretical aspects**

Taking into account the difficulties in translating the term "bullying" (see subchapter 3.2. of the present paper) the evaluation of the bullying phenomenon in schools poses a problem for researchers in this domain.

Comparing different methods of evaluation of bully/victim problems of 100 children aged between 9-15 years old, Ahmad and Smith (1990) concluded that one of the best methods of evaluating the incidence of bully/victim problems in gymnasium students was anonymous self-evaluation pertaining to Bully/Victimization Questionnaire used by Olweus in Norway.

Although Olweus's Questionnaire is translated in different languages some difficulties in the proper translation of the term "bullying" still exists (Smith et al., 2002).

In order to surpass these inconveniences, Smith and collaborators (2002) offer an alternative in the general usage of the term "bullying" in questionnaires, more specific he requires concrete information, giving as an example the "Life in School Questionnaire" developed by Arora, which asks students if they were involved in experiences like: to be hit, threatened, teased or being called names.

For testing the efficiency of an anti-bullying program in Flemish schools, Stevens, de Bourdeaudhuij and Van Oost (2000) have made and utilized a 3 scale self-evaluation questionnaire for students (bully scale - Cronbach Alpha = 0.82; victimization scale - Cronbach Alpha = 0.81; prosocial behavior scale - Cronbach Alpha = 0.68) (Tabel 1) which includes items from Olweus's Bully/Victims Questionnaire (BVQ) and Arora's "Life in School Checklist" .

In the present study we have pursued the validation of the Romanian version of *The Student Self-Report Questionnaire* (Stevens, de Bourdeaudhuij, & Van Oost, 2000) in order to utilize this in Romanian studies on this subject.

##### **4.4.2. Operational objectives and hypotheses of the study:**

**Objective 1.** *Validity study* of the Romanian version of *The Student Self-Report Questionnaire* regarding the bullying phenomenon made by Stevens, de Bourdeaudhuij and Van Oost (2000) *under the criteria aspect*, applied to a group of Romanian speaking students from a middle-school in Cluj-Napoca.

In this case, there were formed *two contrasting groups* (the most aggressive - the least aggressive); the most victimized - those that are not victimized; the most popular - the least popular) for each scale of the questionnaire (bullying, victimization, prosocial behavior among students) using the objective appreciation personality method (Zapan, 1984).

##### **Pursued hypotheses were:**

- a) Students from the most aggressive group would obtain statistically significantly higher scores on items from the bully aggressivity scale than students from the nonaggressive contrast group;

- b) Students from the most victimized group would obtain statistically significantly higher scores on items from the victimization scale than students from the nonvictimized contrast group;
- c) Students from the most popular group would obtain statistically significantly higher scores on items from the prosocial behavior scale than students from the nonpopular contrast group.

**Objective 2.** Analysis of Internal Consistency of the the three scales (Romanian version) of *The Student Self-Report Questionnaire* regarding the bullying phenomenon made by Stevens, de Bourdeaudhuij and Van Oost (2000) on a sample of Romanian speaking students from a middle-school in Cluj-Napoca.

#### 4.4.3. Methods

##### *Participants*

The sample is made up of 210 students (82 girls and 128 boys) with ages ranging from 11 to 14 years old from the 5<sup>th</sup> grade (42 students), 6<sup>th</sup> grade (78 students) and 7<sup>th</sup> grade (85 students) from a representative neighbourhood middle-school from Cluj-Napoca ("Ion Agârbiceanu" School). The election of the students was conducted by the principle of random selection. The choice of middle-school students was that according to numerous studies (Rigby & Slee, 1991; Whitney & Smith, 1993) children with ages ranging from 10 to 16 years old are at an increased risk in regards of bully/victim problems.

##### *Instruments*

*The Student Self-Report Questionnaire* created by Stevens, Bourdeaudhuij, Van Oost (2000) translated into Romanian language. The questionnaire consists of three scales: the bullying scale, the victimization scale and the positive behavior scale. Only two scales were used in this study (*the bullying scale and the victimization scale*) which assess the frequencies of bullying, victimization as well as the forms of bullying and victimization (social isolation, verbal, physical, indirect) during the three months prior to this survey.

The values assigned to the possible answers to the items are: 0 - it has never happened; 1 - it has twice; 2 - it happened sometimes; 3 - it happened often; 4 - it happened very often (several times a week).

*Objective appreciation personality method* (Zapan, 1984) is a peer-report type of method. The main hypothesis of this method is that different assessments made by people on others offer real data about their personality. Thus, the necessary data is obtained from student's assessments of their peers. The feedback will be the more objective if the subjects know each other better.

In the present research, objective appreciation personality method has a criterion role for the study of the relative validity of a criterion of *The Student Self-Report Questionnaire* made by Stevens, de Bourdeaudhuij, Van Oost (2000), translated and adjusted to Romanian language. On the basis of the scores achieved through the objective appreciation personality method *contrasting groups* were created, one formed from students who have obtained high values and another from students who have obtained low values.



Thereby, using the assessments made by students regarding aggressivity, victimization and popularity of their peers (including self-evaluation) there were formed the following contrasting groups: the most aggressive (bullying type) and the least aggressive students - on the bullying scale; the most victimized and nonvictimized - for the victimization scale; the most popular (beloved, helped in need by other students) and those least popular - on the prosocial behavior scale. The reason behind this choice of contrasting groups (aggressive - nonaggressive, victims - nonvictims, most popular - least popular) is that aggressors, victims and populars are the representative categories for what the three scales measure.

Listing of the five nominated students by each of their peers from class as being the most aggressive was realized by granting points ranging from 5 to 1 (the most aggressive - the least aggressive); and the listing of the five nominated students by each of their peers as being nonaggressive was realized by granting points ranging from 5 to 1 (the most nonaggressive from those nonaggressive - the least nonaggressive).

We made a sum for each nominated student and selected from each class five students who have obtained the highest scores (aggressive - contrasting group), respectively, five students who have obtained the lowest scores (nonaggressive - other contrasting group). The same procedure was applied to other groups for the other two scales.

### ***Procedure***

Each student has anonymously nominated the list with the pupils that would be listed in the three contrasting groups, self-report questionnaire of the frequency of bullying manifestations, victimization and positive behavior among students.

Nominating students that will be listed in the three contrasting groups and filling of the questionnaire was preceded by giving an explanation regarding aggressive behavior.

It was also specified that the positive meanings of the words "aggressive behavior" (initiative, courage, ambition) that sometimes appear in the common usage are not to be taken into consideration.

Also, it was considered necessary to define the term of aggressivity in general, before giving the definition of bullying, because in Romanian same as in other Romance languages there is no proper word to accurately describe bullying. Thus, the behavior that describes bullying was presented to students as being an aggressive behavior, underlining the dominant position of the aggressor as well as the recurrence of the aggression that distinguishes bullying from the general aggressive behavior (fighting or arguing between students of similar physical or psychological strength). Furthermore, as a correspondent of the English term "bullying", we have used the Romanian syntagm "comportament agresiv-repetitiv-abuziv" .

Moreover, examples of situations have been given (with the contribution of students) in which the victim - pupil is feeling inferior or feeling that he/she is not able to stand up against the aggressor.

Filling out the questionnaire took 30 minutes. The students have been assured of the confidentiality of their answers. Questioning of the students was conducted in March 2004.

### **4.4.4. Results**

#### ***Test validity, relative to the criterion***

An analysis has been conducted on individual level of each item and globally for the three scales. The averages of the scores obtained from the two contrasting groups

corresponding to each scale were statistically compared both at the single items level and global level of each of the three scales of the questionnaire.

#### *Bullying scale*

In order to establish if the difference between the averages of the obtained scores from the contrasting groups (aggressive vs. nonaggressive) on the single taken items and an a global level is significant ( $p < 0.05$ ) t test was applied for independent samples (Table 2).

The obtained results indicate significant differences between the two groups (the most aggressive - the most nonaggressive) at the established threshold of significance ( $p < 0.05$ ) for each of the scale items. More significant differences were obtained for items 3 (indirect aggressivity) and 6 (physical aggressivity), while lower differences between the contrasting groups were obtained for item 11 (verbal aggressivity).

Regarding the difference between the contrasting groups on the aggressivity scale score the difference was statistically significant,  $t(92) = 4.88$ ;  $p < 0.001$ ;  $d = 1.01$ .

#### *Victimization scale*

In order to establish if the difference is significant ( $p < 0.05$ ) between the averages of the scores obtained by the contrasting groups on the separated items as well on the global level, t test was applied for the independent samples (Table 3).

The obtained results indicate significant differences between the averages of the two contrasting groups on 6 items from an 8 scale item. Higher differences were obtained on item 1 (threatening), while differences that are not statistically significant were obtained on items 4 (lies) and 15 (calling names).

The difference between the contrasting groups on the victimization scale was statistically significant,  $t(92) = 4.47$ ;  $p < 0.001$ ;  $d = 0.97$ .

#### *Prosocial behavior scale (popular students)*

In this case, in order to establish potential significant differences ( $p < 0.05$ ) between the contrasting groups we have once again employed the t test on the item level, as well as on the global level on the prosocial behavior scale.

The results indicate significant differences between the two groups (the most popular - unpopular) at the threshold of significance  $p < 0.05$  on all items. Higher differences were obtained on items 12 "...other colleagues borrow you something" and 14 "...other colleagues talk with you about their hobbies".

The difference between the contrasting groups on the global score on the positive behavior scale was statistically significant,  $t(92) = 5.15$ ;  $p < 0.001$ ;  $d = 1.10$ .

#### *Internal consistency of the three scales*

For the internal consistency analysis of each scale of The Student Self-Report Questionnaire by Stevens, de Bourdeaudhuij and Van Oost (2000) Cronbach alpha coefficient was calculated.

Cronbach alpha values for the three scales of The Student Self-Report Questionnaire (Romanian model) are: (a) 0.81 for the bullying scale; (b) 0.63 for the victimization scale; (c) 0.72 for the positive behavior scale. These coefficients reflect a high internal consistency of the items of each scale, especially for the bullying scale and prosocial behavior scale.

#### 4.4.5. Discussion and conclusion

The obtained data support the psychometric qualities of the questionnaire, all the three scales being able to differentiate efficiently (see Cohen  $d$  coefficient values particularly high <Sava, 2004> with values ranging from 0.99 to 1.10). Thus, the bullying scale differentiates very well between aggressive and nonaggressive students, victimization scale between students often subjected to aggressions and less subjected students to victimization, while the positive behavior scale clearly differentiates between popular and unpopular students.

Two items from the questionnaire, both pertaining to the victimization scale, fail to differentiate efficiently between the two contrasting groups.

From the two items, item 4 emphasizes an evolution tendency of the averages in the expected direction, but it is not statistically different. In the case of item 15 (use of nicknames) the lack of differences can have its cause in an ambiguous formulation, because there are nicknames with a positive or neutral connotation (eg. "master"), not only nicknames with negative connotations. Therefore, the item could be easily rephrased or emphasize that only negative nicknames are to be considered.

From the Table 1 data we can deduce that *The Student Self-Report Questionnaire* proposed by Stevens, de Bourdeaudhuij and Van Oost (2000) has good psychometric properties regarding criterion validity and internal consistency. In consequence, it could be employed in the future evaluation of bullying and victimization, but also in the study of prosocial behavior, like factors of popularity growth of a student among his peers. The obtained data have as a limit the demographical validation category of the questionnaire formed from middle-school students.

Likewise, from the analysis of the averages on each scale it is ascertained a higher level of prosocial behavior than bullying or victimization behavior, which can indicate, either a certain sensitivity and availability of the students to offer answers socially desirable, either a higher frequency of prosocial behaviors in the studied school environment.

Table 1

*Mean (M), standard deviation (SD) and significance of the difference between the averages of the obtained scores from the contrasting groups*

<i>Variable</i>		<i>Contrast group 1</i>		<i>Contrast group 2</i>		<i>t</i>	<i>p &lt;</i>
		<b>M</b>	<b>SD</b>	<b>M</b>	<b>SD</b>		
<b><i>Bullying scale</i></b>		<b><i>Aggressors</i></b>		<b><i>Non- aggressors</i></b>			
$\alpha = 0.81$	Overall score	15.98	6.37	9.68	6.14	4.88	0,001
	Item 3	1.38	1.17	0.'64	0.94	3.39	0.01
	Item 6	2.08	1.44	1.'15	1.23	3.38	0.01
	Item 8	2.02	1.21	1.30	1.23	2.88	0.01
	Item 10	1.76	1.33	0.91	1.25	3.19	0.01
	Item 11	2.91	1.17	2.32	1.81	2.45	0.05
	Item 16	1.57	1.34	0.81	1.12	3.00	0.01
	Item 20	2.23	1.37	1.36	1.24	3.23	0.01
	Item 21	2.00	1.30	1.19	1.29	3.02	0.01

<i>Victimization scale</i>		<i>Victims</i>		<i>Non-victims</i>			
$\alpha = 0.63$	Overall score	15.39	4.83	11.32	3.57	4.47	0,001
	Item 1	1.84	1.05	1.02	1.11	3.46	0.01
	Item 2	2.08	1.10	1.02	0.65	3.23	0.01
	Item 4	2.23	1.26	1.95	1.25	1.02	NS
	Item 9	1.18	1.20	0.47	0.77	3.26	0.01
	Item 13	1.71	0.80	1.15	0.88	3.03	0.01
	Item 15	2.37	1.49	2.66	1.49	-0.89	NS
	Item 17	2.10	1.11	1.42	0.81	3.27	0.01
	Item 22	1.87	1.16	1.23	0.63	3.01	0.01
<i>Prosocial behavior scale</i>		<i>Popular</i>		<i>Non-popular</i>			
$\alpha = 0.72$	Overall score	17.53	4.04	13.32	3.67	5.15	0,001
	Item 5	2.87	1.17	2.23	0.81	2.98	0.01
	Item 7	2.98	1.19	2.18	1.24	3.09	0.01
	Item 12	3.11	1.15	2.37	1.07	3.13	0.01
	Item 14	2.19	1.23	1.42	1.05	3.19	0.01
	Item 18	3.57	0.85	2.88	1.24	3.05	0.01
	Item 19	2.81	0.95	2.23	1.00	2.81	0.01

The practical implications of the present study put a spotlight on *The Student Self-Report Questionnaire* as a monitoring tool for the results of different intervention programs in school that have as a target the decrease of aggressive behaviors and the increase of positive attitudes and behaviors among students.

#### **4.5. Study 2 - Pilot study regarding the incidence, types of aggressive manifestations and the characteristics of students involved in aggressive acts at school**

This study preceding the implementation of the *Anti-aggressivity School Program* was conducted in order to identify the nature and the amplitude of aggressive manifestations in middle-schools.

##### **4.5.1. Succinct theoretical aspects**

In this research, like it was specified in 4.1. section, bullying is considered a specific form of school violence.

##### **4.5.2. Operational objectives and the hypotheses of the study**

**Objective 1.** Identification on the basis of student's opinion of two middle-schools environment represented by: perception of school safety; involvement of teachers and their success in preventing, controlling and reducing violent behaviors; drug consumption, alcohol use and vandalism by students; strong language used by students against teachers.

**Objective 2.** Evaluation of violent behavior frequency according to gender and school level in students from two middle-schools, and the identification on the basis of student's opinion of

the place and time where these types of manifestations occur, as well as the traits of those involved.

**Objective 3.** Evaluation of the frequency and types of bullying, victimization and prosocial behavior according to gender and school level in students from two middle-schools.

#### 4.5.3. Methods

In the present paper the design of the research is non-experimental comparing to descriptive valences.

##### *Participants*

The sample consists of 264 students (142 <53,8%> girls and 122 <46,2%> boys) of ages ranging between 10 and 14, from two middle schools in Cluj-Napoca.

The selection was made considering certain similarities between the two schools (number of students - low; social-economic-cultural level of the parents - average; school performance - average; location - neighborhood school; frequency of student behavior problems - average) compared to the middle schools in Cluj-Napoca. This condition was required by a larger study carried out, which the present study is part of.

Table 2

*Distribution of the lot of students according to gender and school level*

<b><i>GENDER LEVEL</i></b>	<b><i>GIRLS</i></b>	<b><i>BOYS</i></b>	<b><i>TOTAL</i></b>
V-VI	51	91	<b><i>142</i></b>
VII-VIII	62	60	<b><i>122</i></b>
TOTAL	113	151	<b><i>264</i></b>

##### *Instruments*

- *Evaluation of violent behavior in school Questionnaire* of Roşan (2009) filled out by students,
- *The Student Self-Report Questionnaire* made by Stevens, de Bourdeaudhuij and Van Oost (2000) translated and adapted in Romanian (Beldean-Galea, Jurcău, 2010) (see subchapter 4.4. on the present paper).

##### *Procedure*

Each student has anonymously filled out the two questionnaires at the beginning of October during tutor class.

#### 4.5.4. Results

##### **A. Evaluation of school environment**

The analysis of the results gathered regarding the opinion of students on the school environment discloses that a high number of students (77.26%) consider that teachers take steps in reducing violent behaviors. Drug use represents the least reported issue among the surveyed students. Therefore, only 6.43% of pupils reported witnessing cases of the aforementioned activity.

## B. Evaluation of the frequency of violent manifestations

The analysis of indicators present in the study of violent behaviors from school emphasized that a high number of students from the studied lot (76%) reported being insulted by other students. Carrying blunt objects represents the least reported behavior among the surveyed students. Therefore, only 2.3% of pupils reported carrying blunt objects at school.

Data obtained from the self-report survey shows that compared to boys, girls are more often the target of violent behavior; need more often medical care after violent encounters with other students; are more frequent insulted, mocked, shoved or hit, sexually harassed by school personnel.

The possibility that pupils from lower grades (5th, 6th grade) can be the target of violent manifestations is higher than pupils from 7th or 8th grade.

The frequency of pupils witnessing their peers carrying a weapon is higher among those of higher grade (7th, 8th grade) than pupils from lower grades (5th, 6th grade).

Younger students from lower grades (5th, 6th grade) were more frequent threatened, shoved or hit, than those of higher grades (7th, 8th grade).

## C. Prevalence of bullying, victimization and positive behavior in the sample lot

Data has showed that the frequency of bullying is high among the studied students (Figure 2). From the surveyed pupils 60.8% reported bullying their peers at least twice in the last three months before conducting the questionnaire, and 33.9% frequently or a few times a week.

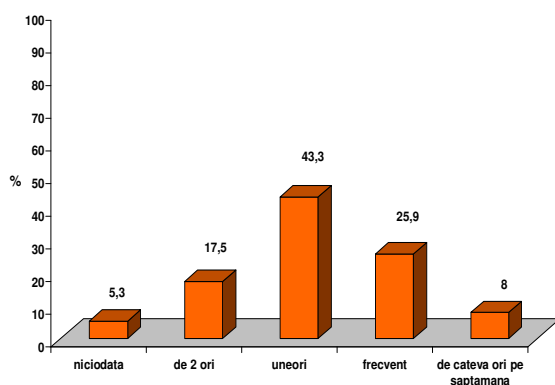


Figure 2. Distribution of the bullying phenomenon in the last three months before surveying the students

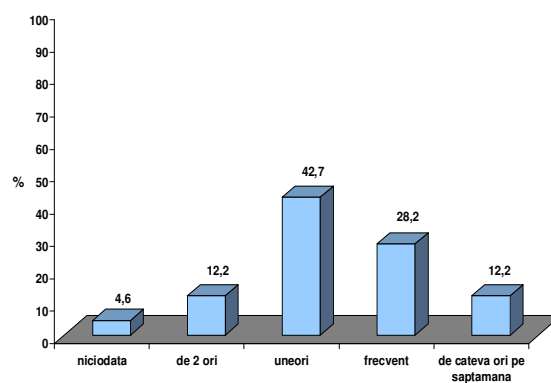


Figure 3. Distribution of victimization among the sample lot in the last three months before the survey

According to self-evaluations the frequency of students who have been victimized in the last three months before conducting the survey is high (Figure 13). 54.8% of students reported being bullied at least twice in the last three months before conducting the survey, while 40.4% reported being bullied frequently or a few times a week.

## Results on gender and school level differences regarding the frequency of bullying and victimization

A statistical significant difference was obtained ( $\chi^2 = 13.92$ ,  $df=4$ ,  $p=0.008$ ) between boys and girls concerning the frequency of bullying (table 3).

Table 3

*Frequency of bullying according to gender and school level*

BULLYING (%)		Never		Twice		Sometimes		Often		Several times a week		$\chi^2$	significance of the difference
		*N	%	*N	%	*N	%	*N	%	*N	%		
Gender	Girls	5	3.6	20	14.3	54	38.6	48	34.3	13	9.3	13.92	p=0.008
	Boys	9	3.6	26	21.1	60	48.8	20	16.3	8	6.5		
Level	V-VI	6	7.3	22	19.6	55	49.1	25	22.3	4	3.6	7.71	NS
	VII-VIII	8	5.4	24	15.9	59	39.1	43	28.5	17	11.3		
Total (group of subjects)		14	5.3	46	17.5	114	43.3	68	25.9	21	8.0		

\*N-number of subjects

In this case, girls tend to bully their peers more often than boys; 43.6% of girls reported bullying other students "frequently" or "a few times a week" compared to 22.8% of the boys.

*Regarding victimization no statistical significant differences were obtained according to gender and school level.*

#### D. Types of bullying and victimization in the sample lot

In order to evaluate gender and school level differences regarding types of aggressive manifestations and victimization, the data was organized as it follows:

- students who chose the item "never" (they did not bully their peers under any form) - represent the *non-aggressors* group
- students who have chosen the other possible items of the questionnaire "two times", "now and then", "frequently", "a few times a week" (they have aggressed their peers under a form or other) represent the *aggressors* group

Table 4 presents data regarding the frequency with which boys and girls from the sample lot bullied under different forms (*direct, indirect, verbal, physical*) other students, at least twice in the last three months before conducting the survey.

Significant statistical differences between boys and girls were obtained regarding indirect bullying ( $\chi^2 = 6.14$  df=1, p=0.01) and physical bullying ( $\chi^2 = 4.29$  df=1, p=0.03). Girls were employing more indirect and physical bullying than boys.

Table 4

*Frequency of bullying of boys and girls from the sample lot*

GENDER BULLYING FORMS	GIRLS		BOYS		$\chi^2$	p*
	Never	Twice or more	Never	Twice or more		
Direct	15 (10.64%)	126 (89.36%)	21 (17.07%)	102 (82.92%)	2.31	NS
Indirect	32 (22.69%)	109 (77.3%)	45 (36.58%)	78 (63.4%)	6.14	0.02
Verbal	20 (14.18%)	121 (85.81%)	22 (17.88%)	101 (82.11%)	0.67	NS
Physical	51 (36.17%)	90 (63.82%)	60 (48.78%)	63 (51.21%)	4.29	0.4

\*statistical significance -  $p < 0.05$

Table 5 presents data regarding the frequency of victimization from students of the sample lot (from grade 5th to 6th and 7th to 8th) at least twice in the last three months before conducting the survey.

Statistical significant differences between grade 5th, 6th and 7th, 8th were obtained regarding *the indirect form* (taken with its subcategories) ( $\chi^2 = 5.7$  df=1,  $p = 0.02$ ) and *verbal form* (taken with its subcategories) ( $\chi^2 = 4.6$  df=1,  $p = 0.03$ ) of victimization. Students from grades 5th and 6th are victimized indirectly and verbally more than students of 7th and 8th grade.

Table 5

*Frequency of victimization forms on the sample lot according to school level*

GENDER BULLYING FORMS	GIRLS		BOYS		$\chi^2$	p*
	Never	Twice or more	Never	Twice or more		
Direct	19 (13.47%)	122 (86.52%)	11 (8.94%)	112 (91.05%)	1.34	NS
Indirect	38 (26.95%)	103 (73.04%)	15 (12.19%)	108 (87.8%)	8.91	0.003
Verbal	16 (11.34%)	125 (88.65%)	4 (3.25%)	119 (96.74%)	6.15	0.02
Physical	37 (26.24%)	108 (76.59%)	23 (18.69%)	100 (81.3%)	0.87	NS

\*statistical significance -  $p < 0.05$

In Table 6 are presented data on the frequency of students in grades (V-VI and VII-VIII) of the studied group of students who were victimized in various forms, at least twice in the last three months prior to the survey.

Statistically significant differences between classes V-VI and VII-VIII were obtained regarding indirect form (taken subcategories them) ( $\chi^2 = 5.7$  df = 1,  $p = 0.02$ ) and verbal form (taken subcategories them) ( $\chi^2 = 4.6$  df = 1,  $p = 0.03$ ) of victimization. Students in grades V-VI are indirectly victimized verbally than students in grades VII and VIII.

Table 6

*Frecvența formelor victimizărilor la lotul de elevi studiat în funcție de nivelul de școlarizare*

GENDER BULLYING FORMS	GIRLS		BOYS		$\chi^2$	p*
	Never	Twice or more	Never	Twice or more		
Direct	19 (13.47%)	122 (86.52%)	11 (8.94%)	112 (91.05%)	1.34	NS
Indirect	38 (26.95%)	103 (73.04%)	15 (12.19%)	108 (87.8%)	8.91	0.003
Verbal	16 (11.34%)	125 (88.65%)	4 (3.25%)	119 (96.74%)	6.15	0.02
Physical	37 (26.24%)	108 (76.59%)	23 (18.69%)	100 (81.3%)	0.87	NS

\*statistical significance -  $p < 0.05$



There were no statistical significant differences between school level (from grade 5th to 6th and from grade 7th to 8th) regarding the frequency of students who bullied others, at least twice in the last three months before conducting the survey.

#### 4.5.5. Discussion and conclusion

Gathered data regarding the frequency of violent behavior in middle-school pupils from urban areas are similar with those presented in the field literature from Romania. Comparable with Roșan's study (2009) "insults from other students", "intentional hitting or shoving", "threatenings from other students", "hitting with the intention of causing harm" are forms of violent behavior which manifest themselves among the studied lot

Obtained data shows that similar to other countries (like pointed out by Krug, Dahlberg, Mercy, Zwi, & Rafael in 2002) bullying is a phenomenon also present in Romanian schools. Therefore, according to self-reports there was recorded a high frequency of bullying, 33.8% and victimization (40.5%) in the sample lot.

Field literature showed that the frequency of bullying and victimization varies not only from a country to another, but also within the borders of the same country. Studies conducted in USA have obtained different results regarding the prevalence of bullies and victims (see Table 7).

Table 7

*Prevalence of middle-school students from different countries that have bullies or victims*

	Bullies	Victims	Number of students involved in study	Country
Nansel & colab. (2001)	19%	60%	15600	SUA
Haynie, Nansel și Eitel (2001)	24%	31%	4263	SUA
Olweus (1993)	7%	9%	150000	Norway & Sweden
Baldry și Farrington (1999)	24, %	30%	238	Italy
Kim, Koh și Leventhal (2004)	17%	14%	1756	Korea
Alikasifoglu, Erginoz, Ercan, Uysal, and Albayrak-Kaymak (2007)	9.2%	22%	4263	Turkey

Bullying and victimization variation from country to country can be explained by the fact that the methodology presents differences from one study to another, namely: different definitions for bullying and the forms of bullying studied; different incidence/intensity; methodological differences and school or class-specific factors (Nansel et al., 2004; Scheithauer et al., 2006; Williams & Guerra, 2007).

From this study, according to student's self-reports it can be gathered that girls bully others more often than boys do. These results contrast with the results of other studies: Baldry and Farrington (1999); Genta et al., (1996); Nansel et al., (2001); Scheithauer et al., (2006) which have showed that boys bully others more often than girls do. Aside methodological characteristics of the sample lot (see chapter 4.5.3.) which could explain these results, it can be pointed out the different way in which boys and girls perceive certain forms of bullying.

We emphasize that the frequency of bullying and victimization differ from one country to another even based on gender. Therefore, in a study conducted by WHO in countries from Europe, in USA, Canada it was shown that in Norway and Sweden the frequency of bullying

in girls is lower than those from Greenland (Currie et al., 2008). Also, higher bullying percentages were recorded in boys from Romania, Greenland and Estonia than in boys from Sweden, Czech Republic and Hungary. The situation is similar in the case of the victims.

In the present study, we can mention that there are no gender differences concerning victimization and positive behavior. These results are in accord with other studies (Genta et al., 1996; Scheithauer et al., 2006).

Regarding *the manifestation forms* of bullying, according to this study, girls tend to bully others more than boys do, by indirect bullying (verbal, manipulation and social isolation). According to Olweus (1993), his studies have shown that the indirect form of bullying is specific to girls. Although studies like those of Lagerspetz, Björkqvist and Peltonen (1988) and Rivers and Smith (1994) have shown that the direct physical form is frequently encountered in boys, the results of this study have shown that girls comparing to boys tend to bully others more by using the direct physical form. Regarding victimization, boys are more indirectly and verbally victimized than girls, and students from lower grades 5<sup>th</sup> and 6<sup>th</sup> are more victimized indirectly and verbally than students from grade 7<sup>th</sup> and 8<sup>th</sup>.

The results of this study need to be interpreted from the perspective of the characteristics of the studied schools where students with a low or medium socio-eco-cultural background learn.

#### **4.6. Study 3 - Level of social and emotional wellbeing and psycho-social adjustment of bullies and their victims**

##### **4.6.1. Succinct theoretical aspects**

The results obtained in "study 2" from this paper, have imposed a more thorough study regarding the bullying phenomenon, namely, the identification of psycho-social characteristics of those students classified as bullies, victims, and bully-victims.

Numerous field studies (mentioned in subchapter 3.3.) have showed that children classified as bullies, victims or bully-victims have a low level of social and emotional wellbeing (Dake, Price, & Telljohann, 2003; Limber, 2002; Smokowski & Kopasz, 2005).

##### **4.6.2. Operational objectives and hypotheses of the study**

**Objective 1.** Evaluation of the relationship between bullying, victimization, bullying/victimization and school, social and psychosocial (internalizing and externalizing) abilities using evaluations done by several groups (parents, teachers, students).

**Objective 2.** Study of the relationship between social and emotional (behavioral, social, emotional, educational) indicators, *external* factors - community, family, school, *internal* factors - socio-emotional contributing to the socio-emotional wellbeing and *bullying, victimization, bullying/victimization*.

##### **General hypothesis**

Students who have self-evaluated themselves as being bully/victims will form a group which will significantly differ regarding school, social abilities and psychosocial wellbeing from the students who self-evaluated themselves as being bullies, from the students that described themselves as being victims and from the students that described themselves as being uninvolved or very little involved in bullying.

## Operational hypotheses

- a) Students from the "bully/victim" group will have a significant lower level of social and emotional wellbeing compared to those from the "bully" and "victim" group.
- b) "Bully/victim" category will show more internalizing and externalizing problems than the "bully", "victim" category.

### 4.6.3. Methods

In this step the design of the research is non-experimental, comparative.

#### *Participants*

The participants lot in this study is similar with the lot presented in study 2 of this research (see subchapter 4.5.3., section <participants>).

The students from the sample were classified into four groups (students who were not involved or were little involved in bullying, bullies, victims, bully-victims) based on the data from the items in the bullying and victimization scales from the Student Self-Report (Table 8). The students making up the four groups have been thus distributed:

- Belonging to *the group of students who were not involved or were little involved in bullying* were those who had the lowest scores (0 – never; 1 – twice; 2 –sometimes) on both scales.
- Belonging to the *bully* group were those who scored high on at least one of the items on the bullying scale (3 – often, or 4 – very often) but scored low on the victimization items.
- Belonging to the *victim* group were the students who scored high on at least one of the items of the victimization scale (3 – often, or 4 – very often) but scored low on the bullying scale.
- Belonging to the *bully-victim* group were those who scored high on at least one item of each scale (3 – often, or 4 – very often).

Table 8

*Classification of the students from the sample lot regarding the frequency of bullying and victimization*

Bullying	Never	Twice	Sometimes	Often	Very often
Victimization					
Never	5 (1.89%) <sup>a</sup>	2 (0.75%) <sup>a</sup>	4 (1.51%) <sup>a</sup>	1 (0.37%) <sup>b</sup>	1 (0.37%) <sup>b</sup>
Twice	6 (2.27%) <sup>a</sup>	49 (18.56%) <sup>a</sup>	17 (6.43%) <sup>a</sup>	5 (1.89%) <sup>b</sup>	6 (2.27%) <sup>b</sup>
Sometimes	7 (2.65%) <sup>a</sup>	31 (11.74%) <sup>a</sup>	39 (14.77%) <sup>a</sup>	8 (3.03%) <sup>b</sup>	10 (3.78%) <sup>b</sup>
Often	1 (0.37%) <sup>c</sup>	9 (3.4%) <sup>c</sup>	9 (3.4%) <sup>c</sup>	5 (1.89%) <sup>d</sup>	3 (1.13%) <sup>d</sup>
Very often	4 (1.51%) <sup>c</sup>	14 (5.3%) <sup>c</sup>	10 (3.78%) <sup>c</sup>	5 (1.89%) <sup>d</sup>	13 (4.92%) <sup>d</sup>

<sup>a</sup> - uninvolved or little involved in bullying; <sup>b</sup> - bullies; <sup>c</sup> - victims; <sup>d</sup> - bully/victim

The reason why the students who reported being bullies and/or victims “twice” and “sometime” were put into the same category with the students who answered “never” was to balance the number of students in the compared groups. At the same time, given that the period considered for the answers was ‘the past three months’ the students who reported being

bullies and/or victims “twice” or over “sometime” within a three-month period present low levels of bullying and/or victimization. Therefore, it was thought acceptable including them, along with those who answered “never”, in the group of *students who were not involved or were little involved in bullying* compared to the other groups of students who reported being bullies or victims once or several times a week.

### ***Instruments***

- ***Student Self-Report Questionnaire*** made by Stevens, de Bourdeaudhuij, Van Oost (2000) translated and adapted in Romanian language.
- ***Student Social and Emotional Wellbeing Self-Report*** (filled out by students) - (Bernanrd, Stephanon, Urbach, 2007) evaluates the social and emotional level of wellbeing.
- ***The Achenbach System of Empirically Based Assessment (ASEBA)*** adapted to the Romanian population (Achenbach & Rescorla, 2009) for ages 6-18 (*Child Behavior Checklist <CBCL>* filled by the children parents, *Teacher’s Report Form <TRF>* - filled by the teachers; *Youth Self-Report <YSR>*)

### ***Procedure***

Each pupil filled out The Student Self-Report Questionnaire at the beginning of October 2009 during tutor class. The gathered results were employed both in study 2 and 3 of the present research, but the data was organized differently.

During the month of December the following surveys were conducted:

- The Student Social and Emotional Wellbeing Questionnaire;
  - The Achenbach System of Empirically Based Assessment (ASEBA).
- *The Youth Self-Report (YSR)* was applied to each class in maximum 30 minutes durin tutor class.
  - *The Child Behavior Checklist for ages 6-18 (CBCL)* was applied to parents during a trimestral meeting. Before filling out the forms, the parents were explained the objectives of the evaluation and the way to complete the report. The parents who were not at the group meeting were sent through their children a form and a letter explaining them the purpose of the survey, giving them indications for filling out the form and asking them to return the completed reports within a week. Only 204 out of 264 parents completed the reports.
  - *Teacher Report Form For Ages 6-18 (TRF)*. The class tutors or, sometimes, class teachers that knew the students very well completed the report for every student.
  - The YSR, CBCL, TRF forms have been used according to the instructions given in the *Manual for the ASEBA School-Age Forms & Profiles* (Achenbach & Rescorla, 2009).

### **4.6.4. Results**

The analysis of variance (ANOVA) procedure was used to compare the four groups (students who were not involved or were little involved in bullying, bullies, victims, bully-victims) formed considering internalizing and externalizing problems (from the students’ perspective <self-report>, from the parents’ and tutors’ perspectives <evaluating the children>) and general indicators of socio-emotional wellbeing, as well as internal and external factors

that contribute to socio-emotional wellbeing. The confidence interval was established at  $p < 0.05$ . A value of  $p < 0.05$  was considered as being statistically significant.

The results showed that the intergroup dispersion is higher than the intragroup dispersion in the case of abilities (school, social) according to student evaluation by the teachers, adjustment problems according to student's self-report and parents and teachers reports, internalizing problems according to the student's self-reports and externalizing problems according to student's self-reports and parents and teachers reports (see Table 9).

At the same time, intergroup dispersion is much higher than intragroup dispersion in the case of social and emotional general indicators, personal factors, external contributing factors of social and emotional wellbeing.

Therefore, it can be said that there are significant differences between the compared groups (uninvolved or little involved in bullying, bullies, victims, bully/victim) (see Table 9).

Table 9

*Analysis of variance in the formed groups regarding abilities (school, social), adjustment problems, as well as social and emotional wellbeing*

Variables	Groups				F
	Uninvolved or little involved	Bullies	Victims	Bully/victims	
Teacher Reports <b>Total number of problems</b>	N =152 m =48.91 SD=10.67	N =28 m =56.92 SD=14.16	N =42 m =51.78 SD=9.21	N =21 m =56.19 SD=8.93	6.42*
Teacher Reports <b>Internalizing problems</b> (anxiety/depression, loneliness/ depression, physical symptoms)	N =152 m =46.47 SD=9.25	N =28 m =49.25 SD=7.53	N =42 m =50.52 SD=12.04	N =21 m =49.14 SD=9.49	2.41
Teacher Reports <b>Externalizing problems</b> (breaking rules, aggressive behavior)	N =152 m =49.84 SD=11.79	N =28 m =60.17 SD=19.14	N =42 m =50.33 SD=10.09	N =21 m =59.33 SD=12.22	7.99*
Parent Reports <b>Total number of problems</b>	N =124 m =46.31 SD=9.27	N =25 m =54.8 SD=10.7	N =37 m =48.45 SD=8.26	N =18 m =51.77 SD=12.62	6.35*
Parent Reports <b>Internalizing problems</b> (anxiety/depression, loneliness/ depression, physical symptoms)	N =124 m =45.39 SD=8.18	N =25 m =48.88 SD=11.41	N =37 m =48.94 SD=8.21	N =18 m =49.11 SD=10.44	2.63
Parent Reports <b>Externalizing problems</b> (breaking rules, aggressive behavior)	N =124 m =47.32 SD=10.6	N =25 m =58.16 SD=8.62	N =37 m =46.94 SD=10.46	N =18 m =52.83 SD=13.6	8.41*
Student Self-Reports <b>Total number of problems</b>	N =155 m =38.92 SD=9.24	N =28 m =50.6 SD=12.47	N =46 m =43.13 SD=9.94	N =23 m =51 SD=11.89	18.09*
Student Self-Reports	N =155	N =28	N =46	N =23	17.27*

<b>Internalizing problems</b> (anxiety/depression, loneliness/ depression, physical symptoms)	m =46.70 SD=9.2	m =52.64 SD=11.71	m =51.84 SD=10.39	m =53.86 SD=10.23	
Student Self-Reports	N =155	N =28	N =46	N =23	
<b>Externalizing problems</b> (breaking rules, aggressive behavior)	m =42.79 SD=10.83	m =57.78 SD=13.72	m =42.67 SD=9.96	m =57.08 SD=16.72	21.52*
Wellbeing - General indicators (emotional, educational, behavioral, social)	N =145 M =43.19 SD=6.52	N =25 M =38.48 SD=6.23	N =41 M =39 SD =7.1	N =21 M =35.57 SD =9.06	11.5*
Wellbeing - personal factors (resilience, work, social)	N =147 M =67.23 SD =12.18	N =25 M =56.44 SD =8.6	N =40 M =63.47 SD =13.08	N =21 M =55.61 SD =11.68	10.26 *
Wellbeing - external factors (school, family, community)	N =147 M =79.83 SD =15.57	N =25 M =67.2 SD =19.71	N =41 M =75.09 SD =20.57	N =21 M =64.28 SD =19.84	7.71*

\*p<0.05, N - number of subjects; M - mean; SD – standard deviation

In order to specify the difference between the four groups we have employed post hoc methods when F was statistically significant (p<0.05). Uniformity dispersion (tested by Levene's test) among the groups has been taken into account in order to choose the appropriate procedure - in post hoc method.

In the situations where we obtained heterogeneous dispersions, unequal between the groups (results statistically significant - on the uniformity of variance test) Tamhane's test was applied as a post-hoc method, and in situations in which equal dispersions between groups were obtained (statistically insignificant results - on the uniformity of variance test) Bonferroni test was applied as a post-hoc method.

After post-hoc comparisons the obtained results regarding abilities (school, social) of the students according to teachers reports have showed that the victim students and bully/victim show a lower level of abilities (school, social) comparing to students uninvolved or little involved in bullying (Table 10).

Table 10

*Post-hoc comparisons regarding students abilities (in social and school activities) according to parents reports*

Groups	Uninvolved or little involved	Victims	Bullies	Bully/victim
	TRF (B)	TRF (B)	TRF (B)	TRF (B)
Uninvolved or little involved	-			
Victims	B (2.66)*	-		
Bullies	B (0.43)	B (2.22)	-	
Bully/victim	B (2.74)*	B (0.08)	B( 2.3)	-

\* statistical significance (p<0.05); B - Bonferroni test; TRF - Teacher Report Form.

The gathered results after post-hoc comparisons regarding students adjustment problems have showed that according to students self-reports, significantly more students from the victim group and bully/victim present adjustment problems compared to uninvolved or little involved students in bullying and the bully group (Table 11).

According to tutor reports a significantly higher number of students from the victim and bully/victim group present adjustment problems compared to those uninvolved or little involved in bullying (Table 11).

A significantly higher number of students from the victim group present adjustment problems comparing to the uninvolved or little involved in bullying, according to parents reports (Table 11).

Table 11

*Post-hoc comparisons regarding student adjustment problems according to self-reports, tutor and parent reports*

<i>Groups</i>	Uninvolved or little involved			Victims			Bullies			Bully/victim		
	YSR (B)	TRF (B)	CBCL (B)	YSR (B)	TRF (B)	CBCL (B)	YSR (B)	TRF (B)	CBCL (B)	YSR (B)	TRF (B)	CBCL (B)
Uninvolved or little involved	-	-	-									
Victims	11.67*	8.01*	8.48*	-	-	-						
Bullies	4.2	2.87	2.14	7.47*	5.14	6.34	-	-	-			
Bully/victim	12.07*	7.27*	5.46	0.39	0.73	3.02	7.86*	4.4	3.31	-	-	-

\*statistical significance ( $p < 0.05$ ); B - Bonferroni test; YSR- Youth Self-Report; TRF - Teacher Report Form; CBCL- Child Behavior Checklist

The results obtained after post-hoc comparisons regarding internalizing problems of students according to self-reports have showed that significantly more students from the victim group, bully and bully/victim present such issues compared to uninvolved or little involved students in bullying (Table 12).

Table 12

*Post-hoc comparisons regarding internalizing problems according to students self-reports*

<i>Groups</i>	Uninvolved or little involved	Victims	Bullies	Bully/victim
	YSR (B)	YSR (B)	YSR (B)	YSR (B)
Uninvolved or little involved	-			
Victims	5.93*	-		
Bullies	5.14*	0.79	-	
Bully/victim	7.16*	1.22	2.02	-

\*statistical significance ( $p < 0.05$ ); B - Bonferroni test; YSR- Youth Self-Report

Results obtained after post-hoc comparisons regarding externalizing problems have showed that a significantly higher number of students from the victim and bully/victim group

present these problems comparing to uninvolved or little involved students in bullying and bully group, according to student self-reports (Table 13).

Likewise, a significantly higher number of students from the bully/victim group present externalizing problems comparing to uninvolved or little involved students in bullying and to those of the bully group, according to teacher reports (Table 13).

According to parent reports a significantly higher number of students from the victim group present externalizing problems comparing to those uninvolved or little involved in bullying and bully group (Table 13).

Table 13

*Post-hoc comparisons regarding externalizing problems according to student self-reports, tutor and parent reports*

Groups	Uninvolved or little involved			Victims			Bullies			Bully/victim		
	YSR (T)	TRF (T)	CBCL (B)	YSR (T)	TRF (T)	CBCL (B)	YSR (T)	TRF (T)	CBCL (B)	YSR (T)	TRF (T)	CBC L (B)
Uninvolved or little involved	-	-	-									
Victims	14.99*	10.32	10.83*	-	-	-						
Bullies	0.11	0.48	0.37	15.11*	9.84	11.21*	-	-	-			
Bully/victim	14.29*	9.48*	5.51	0.69	0.84	5.32	14.41*	9*	5.88	-	-	-

\*statistical significance ( $p < 0.05$ ); B - Bonferroni test; T - Tamhane Test; YSR- Youth Self-Report; TRF - Teacher Report Form; CBCL- Child Behavior Checklist

Results obtained after post-hoc comparison regarding social and emotional wellbeing have showed that uninvolved or little involved students in bullying present a high level of social and emotional wellbeing comparing to the victim, bully and bully/victim group (Table 14).

Table 14

*Post-hoc comparison regarding social and emotional wellbeing*

Groups	Uninvolved or little involved			Victims			Bullies			Bully/victim		
	IG (B)	FP (B)	FE (T)	IG (B)	FP (B)	FE (T)	IG (B)	FP (B)	FE (T)	IG (B)	FP (B)	FE (T)
Uninvolved or little involved	-	-	-									
Victims	4.71*	10.79*	12.63*	-	-	-						
Bullies	4.19*	3.76	4.73	0.52	7.03	7.89	-	-	-			
Bully/victim	7.62*	11.61*	15.55*	2.9	0.82	2.91	3.42	7.85	10.81	-	-	-

\*statistical significance ( $p < 0.05$ ); GI - general indicators of social and emotional wellbeing; PF - personal factors that influence social and emotional wellbeing; EF - external factors that influence social and social and emotional being; B - Bonferroni Test; T - Tamhane Test.

Regarding *personal factors* that can contribute to social and emotional wellbeing in the uninvolved or little involved students in bullying present a significantly higher level of



personal factors that contribute to social and emotional wellbeing comparing to students from the victim, bully and bully/victim group (Table 14).

Concerning *external factors* that can contribute to social and emotional wellbeing students from the uninvolved or little involved group in bullying present a significantly higher level of external factors that contribute to social and emotional wellbeing than those from the victim, bully and bully/victim group (Table 14).

#### 4.6.5. Discussion and conclusion

Results of the study confirm the hypothesis according to which bully and victimized students constitute a group that differs significantly in what concerns school and social abilities, psychosocial adjustment, social and emotional wellbeing, comparing to the bully, victim and uninvolved or little involved groups in bullying.

Also, from the four compared groups, *victims and bully/victims* have the weakest psychosocial functioning.

Similar results from the field literature, namely those of Haynie, Nansel and Eitehl (2001) and Nansel et al., (2001) have pointed out that *bully/victims* have the poorest psychosocial functioning comparing to bullies and passive victims.

The results of the present study emphasize an absolute consistency between the evaluators answers concerning victim adjustment. According to student self-reports, teachers, and parents reports, the probability that *victims* show adjustment problems is significantly higher compared to the group of those uninvolved or little involved in bullying.

Furthermore, it is pointed out a partial consistency between the answers of the evaluators concerning adjustment and externalizing problems of bully/victims. Therefore, according to teachers and students reports the probability that *bully/victims* show adjustment problems, especially externalizing problems it is significantly higher than those uninvolved or little involved in bullying and externalizing problems compared to bullies. According to parents and students reports the probability that *victims* show externalizing problems is much higher when compared to uninvolved or little involved students in bullying.

Taking into consideration all the situations in which one category of evaluators noticed significant differences between the categories of subjects involved in the study, we can assert that:

- *victims* display a lower level of abilities (social, school); higher adjustment problems; internalizing and externalizing problems; a lower level of social and emotional wellbeing influenced by a low level of external factors (community, family, school) and internal factors (resilience, social and work) compared to the uninvolved or little involved group.

Although the majority of the studies from field literature associated victimization with internalizing problems, in this particular study a significantly higher number of victims displayed externalizing problems when compared to *uninvolved or little involved students*. However, given that indiscipline is an indicator of the externalizing problems, the results of this study are similar to those obtained by Haynie et al., (2001) that showed how being a victim positively correlate with indiscipline.

- *bully/victims* display more adjustment problems, especially internalizing problems; a significantly lower level of social and emotional wellbeing influenced by a low level of external factors (community, family, school) and internal factors (resilience, social

and work) compared to the uninvolved or little involved students. Furthermore, they display more externalizing problems when compared to bullies.

Results obtained in this study regarding the bully/victim group are consistent with other studies, like those conducted by Nansel and collaborators (2001) in which bully/victims have reported loneliness and having more problems with their peers, but also poorer school performance and higher consumption of alcohol and cigarettes than their colleagues.

- Compared to uninvolved or little involved students, *bullies* display significantly higher internalizing problems; a lower level of social and emotional wellbeing influenced by a low level of external factors (community, family, school) and internal factors (resilience, social and work).

Kaltiala-Heino and collaborators (2002) have showed that depression and suicidal ideation are associated with bullying. Also, Sraubstein and collaborators (2006) have pointed out the presence of psychosomatic problems in the case of bullies. Although studies like Boulton and Smith (1994) and Kumpulainen and collaborators (1998) have showed that bullies display especially externalizing problems, in this study we have not found this aspect.

The following aspects represent limitations to the study:

- The selection of subjects was not random; the two schools were chosen based on the criteria already stated (see ‘Subjects’).
- Because of the subjects’ characteristics, the results only refer to a certain category of students, namely those who have an average social-economic-cultural background at best, who attend neighborhood schools, have an average school performance and often have behavior problems.
- In the group of uninvolved or less involved students, which in this study was used as a control group, were included both those students who were not involved or who were very little involved in bullying. The ideal situation would have had the control group made only of uninvolved students.

However, this study brings an important contribution to the study of bullying behavior, providing basic information on the psychosocial problems of the students described as “bullies”, “victims” and “bully-victims”.

The results of this study draw attention on those groups of students that are at risk for psychosocial maladjustment.

#### **4.7. Study 4 - efficacy study of a primary prevention program of school violence**

##### **4.7.1. Description of the Anti-Aggressivity Program in School**

The objective of the Anti-Aggressivity Program in School is to prevent and minimize the frequency of violent behaviors, bullying, victimization, as well as increasing the frequency of positive behaviors in middle-school students.

Certain researchers suggest that efficient interventions should focus not only on bullies, but also upon spectators, which encourage bullying passively or actively (Salmivalli, Lagerspetz, Björkqvist, Österman, & Kaukiainen 1996; Salmivalli & Voeten, 2004).

The program targets the development of social and emotional abilities in students who manifest aggressive behaviors, victimized students, as well as non-aggressive and non-victimized students.

The Anti-Aggressivity Program in School is based on "Program Achieve. You Can Do It!" of Bernard (2008) to which were added advertising materials for parents and students.

The program is comprised of:

- *Tutor guide* - refers to a set of lessons (taught to the entire class by their tutor) from the "Program Achieve. You Can Do It!" of Bernard (2008) translated and adapted in Romanian.

This is a cognitive program which teaches students to use Habits of the Mind that support and nourish: *Confidence* - being aware of the fact that probably you will be successful and liked by others. It means not to be afraid to make mistakes or try new things; *Persistence* - making an effort and not give up when things appear difficult or boring; *Organisation* - setting the goal of work hard in school, listen carefully what the teacher says, planning time in a way you would not have to always be in a hurry, have all the materials ready and know when papers are due; *Getting-Along* - getting along with teachers and colleagues, amicably resolving all misunderstandings, respecting class rules and positive contributions at school, at home and in the community, including protecting the rights of others and taking care of the environment; *Resilience* - know how to keep calm and not become angry, depressed or too worried when something "bad" happens. To have the ability to calm yourself and feel better when you get really upset. Moreover, to be able to control your behavior when you are extremely angry and surpass the problem in order to get back to work or play.

Beside these, the program includes activities created to inform the youth about the way they think (e.g. internal language), about how their thinking influences their feelings and behaviors and how to transform irrational, negative thoughts (which are illogical or untrue) in rational, positive thoughts (logical, true and useful) that can help them take responsibility not only for their own person, but also for the learning process.

- ***Advertising materials***

- *Flyers for the students* "**Assertiveness as a middle way between aggressivity and passivity**" created with the purpose of informing the students regarding aspects which describe aggressive, passive and assertive behavior and in the same time convincing them to adopt an assertive behavior instead of a passive or aggressive behavior.

- *Parents Journal* - was conceived with the purpose of familiarizing parents with some information they should know (regarding ways of developing social and emotional abilities of the child) and in the same time urge them to contribute to increase the social and emotional level of their child.

These represent a self-evaluation for the parents regarding the relationship with their child and a foothold for the parents who wish to develop the social and emotional abilities of the child.

#### **4.7.2. Operational objectives**

**Objective 1.** Evaluating the school environment, the frequency of violent manifestations, of bullying, victimization and positive behavior in middle-school students in two gymnasiums.

**Objective 2.** Developing social and emotional abilities in order to improve social and emotional wellbeing of students (bullies, victims), reducing the frequency of violent manifestations, bullying, victimization and increasing positive behaviors in students from a gymnasium.

**Objective 3.** Evaluation of the influence of "school" and "school level" variables on: "social and emotional wellbeing", frequency of "violent manifestations", "bullying" and their "victims", "positive behaviors".

#### 4.7.3. Hypotheses

##### General hypothesis

- Along with the development of social and emotional abilities (by applying the anti-aggressivity program), social and emotional wellbeing will be improved, the frequency of violent manifestations, bullying and victimization will decrease and the frequency of positive behaviors will increase.

#### 4.7.4. Methods

##### Research design

- Type of research - quasi-experimental
- Strategy of research - global evaluation of the anti-aggressivity intervention.

Taking into account the particularities of bullying (involves the aggression of a less stronger physically or/and psychologically pupil by a bigger, stronger pupil) (see chapter 3) and in order to have an account of the frequencies as close to the real one of the studied phenomenon, it was considered necessary to take action steps at class and school level, on all students (bullies, victims, passive witnesses) present at the aggressive act. Therefore, it is necessary that all classes from a school (at least) form a group (experimental or control group).

Considering this aspect, in the present study the selection of the students for the experimental and control group through the randomization method was not possible, therefore, two schools were chosen on the similarity criteria (see section 4.5.3.).

The sample groups (experimental and control) were formed on the basis of the natural criteria (two gymnasium schools) and made use of a quasi-experimental type of group pre-posttest nonequivalent (Aniței, 2007).

An imposed condition by the choice of this design (quasi-experimental) is that the chosen groups must be similar, especially regarding the dependent variables, thus, any of the groups can be taken as experimental or control.

Hence, along the choice of the two schools by certain similarity criteria, a study of "similarity" among them was conducted (results presented in section 4.7.4.1.).

Even if there were differences between the two schools regarding the targeted variables, according to the obtained results it was considered that the schools can represent the experimental and control group in the study.

##### Involved variables

*Dependent variable* - school environment, social and emotional wellbeing, level of violent manifestations, bullying and its victims, level of positive behavior.

*Independent variables* - Anti-aggressivity School Program (described in section 4.7.1.)

**Two conditions** were established:

First condition - conducting the *Anti-aggressivity Program with all its components*. All students (N=122) from grades 5<sup>th</sup> - 6<sup>th</sup> and 7<sup>th</sup> - 8<sup>th</sup> from the school where the bullying intervention program was implemented were involved. Thus, the students from this school (school A) formed the **experimental group**.

Second condition - *control*. Students (N=142) from grades 5<sup>th</sup> - 6<sup>th</sup> and 7<sup>th</sup> - 8<sup>th</sup> from the school where the Anti-aggressivity Program was not conducted formed the **control group** (school B).

## Participants

The lot used in this stage is presented in study 2 of this paper (see subchapter 4.5.3 <participants> section).

According to the obtained results in the equivalence study between the two schools it can be asserted that these are similar and any of them could have represented the experimental group.

Table 15

*Distribution of the student lot according to school and school level*

SCHOOL LEVEL	EXPERIMENTAL GRUP	CONTROL GRUP	TOTAL
V-VI	51	62	113
VII-VIII	71	80	151
TOTAL	122	142	264

## Instruments

- *School Violent Behavior Evaluation Questionnaire* filled out by the students, Roşan (2009).
- *The Student Self-Report Questionnaire* created by Stevens, de Bourdeaudhuij and Van Oost (2000) translated and adapted in Romanian.
- *Social and Emotional Evaluation Questionnaire* (filled out by students) - (Bernard, Stephanon and Urbach, 2007) - presented in a detailed manner in study 3 of the present paper.

Students were asked to fill out the three questionnaires just once, and the gathered information was organized differently in studies 2, 3 and 4.

## Procedure

### Stage 1. Pre-testing

Students from both schools (experimental and control group) filled out *School Violent Behavior Evaluation Questionnaire* and *The Student Self-Report Questionnaire* (see subchapter 4.5.3. section "procedure"); *Social and Emotional Evaluation Questionnaire* (see subchapter 4.6.3. section "procedure") in the pre-test stage in the months of October and December 2009.

### Stage 2. Conducting The ANTI-AGGRESSIVITY Program in School

The Anti-aggressivity Program in School was applied to the experimental group. The three components of the program (presented in section 4.7.1) were applied as follows:

A. *Tutor guide* - the chosen lesson set for this study was taught to the entire class by tutors.

From volume 3 of the program "Achieve. You Can Do It!" of Bernard (2008) destined to students from the 5<sup>th</sup> - 6<sup>th</sup> grade (10-12 years) were chosen a number of 19 lessons from a total of 34, which were taught by tutors and the religion teacher during tutoring class (12

hours), respectively religion class (6 hours), for the 5<sup>th</sup> - 6<sup>th</sup> grades, as well as for the 7<sup>th</sup>-8<sup>th</sup> grade from the Experimental School from January to June 2010.

The first four classes were designed to teach the 4 lessons of the first section - "Getting Started Lessons" (from the 6 sections of the volume) in which were defined terms and basic relationships. After teaching the lessons from the first section, the next sections were chosen to be taught as follows:

Lessons from section 5 - "Getting Along" (six lessons), section 6 - "Resilience" (six lessons) were taught during 12 hours (6 hours on each section). Section 2 - "Confidence" (one lesson), section 3 - "Persistence" (one lesson) and section 4 - "Organization" (one lesson) were taught during 2 hours. Teaching of these lessons during 18 hours involve putting into practice The Foundations (especially "Cooperation" and "Resilience") by students both in their school activities and interpersonal relationships.

Prior to starting teaching these lessons there was a stage (two hours) in which tutors and religion teachers were informed about the content and the objectives of the program.

During the lesson teaching stage there were established periodical meetings with the teachers at approximately 2-3 weeks (20 minutes length of time) meant to clarify problems that could emerge during the lessons.

**B. Advertising Material** - Flyer for the students *"Assertiveness - a middle way between aggressivity and passivity"*

**C. Advertising Material** - *Parents Journal*

This material was sent to parents through their children at the beginning of the first class taught by tutors.

### **Stage 3. Post-test**

Students from both schools (experimental and control lot) filled out the same questionnaires from the pre-test stage. Post-test data was gathered in June, 2010.

### **4.7.5. Results and discussion**

Employed statistical procedures:

- For the "similarity" study between the two schools (section 4.7.5.1.) we have employed descriptive statistical methods, frequencies for the evaluation of violent behaviors prevalence, of bullying, victimization and positive behaviors. In order to determine if there are significant differences between the two schools regarding the frequency and forms of violent manifestations, bullying and victimization we have employed  $\chi^2$  test.

- For understanding the significance of the pre-posttest differences on the social and emotional level (section 4.7.5.2.); frequency of bullying, victimization; positive behaviors (section 4.7.5.3.); violent manifestations (4.7.5.4.); school environment (section 4.7.5.5.) "t" test was employed among sample pairs of each school (experimental and control group). Confidence interval was established at  $p < 0.05$ . A value of  $p < 0.05$  was considered statistically significant.

Also, in order to find out the size effect (in the situations in which significant differences were obtained between pre-test and post-test) Cohen "d" index was employed and coefficient of determination  $r^2$ .

#### 4.7.5.1. "Similarity" study between the two studied schools (part of pre-test stage)

**Hypothesis 1.** The two schools are similar regarding the school environment, frequency of violent manifestations, bullying, victimization and positive behaviors.

Analysis of the gathered data underlined certain differences between the two groups:

- occurrence of swearing addressed to teachers is higher in school A than in school B;
- students from school A were more frequently hit with intention, hurt and insulted by their peers, than students in school B, in the last three months before conducting the questionnaire;
- students from school A tend to be more frequently shoved, hit and offended during "breaks" than students from school B;
- students from school A were more frequently insulted, hit or shoved by someone from the school personnel than students from school B in the last three months before conducting the questionnaire;
- in school B the frequency of bullying and in the same time of positive behavior is higher compared to school A.

#### 4.7.5.2. Efficacy evaluation of The Anti-aggressivity School Program regarding the increase of social and emotional wellbeing

**Hypothesis 2.** Social and emotional wellbeing will significantly increase after the intervention at the school where the program has been implemented compared to the school where the program has not been implemented.

*Evaluation of the difference significance between pre-posttest means and the size effect on the experimental and control group regarding social and emotional wellbeing.*

In the case of general indexes of social and emotional wellbeing (absolute) even if the pretest and posttest results at the two schools have displayed the accounted results, that is the increase of social and emotional wellbeing in the posttest stage of the experimental group and the decrease of the social and emotional wellbeing of the control group in the posttest stage, significant differences still exist only in the case of the "emotional" subscale,  $t(116)=-2.14$ ,  $p<0.05$  of the experimental group (see Table 16). Although, statistically significant, this result does not hold a practical importance because the size effect has a low intensity ( $d=-0.2$ ).

Table 16

*Pre-posttest comparisons on the experimental and control group regarding general indexes of social and emotional wellbeing*

Variables	Experimental group (N=117)						Control group (N=114)			
	Pretest	Posttest	t	p	d		Pretest	Posttest	t	p
General indicators of social and emotional wellbeing (total)	M=40.69 SD=7.86	M=41.02 SD=7.59	-1.14	SI	-		M=41.82 SD=6.69	M=41.72 SD=6.54	0.46	SI
<i>Behavioral</i>	M=8.23 SD=2.64	M=8.41 SD=2.53	-1.57	SI	-		M=8.52 SD=2.1	M=8.64 SD=2.19	-1.02	SI
<i>Social</i>	M=14.2 SD=3.43	M=14.41 SD=4.29	-0.83	SI	-		M=14.89 SD=3.01	M=14.84 SD=2.99	0.26	SI
<i>Emotional</i>	M=4.11 SD=1.46	M=4.2 SD=1.48	-2.14	0.04	-0.2		M=3.88 SD=1.25	M=3.81 SD=1.23	0.39	SI
<i>Educational</i>	M=14.07 SD=3.63	M=13.98 SD=3.51	1.43	SI	-		M=14.48 SD=3.46	M=14.44 SD=3.5	0.68	SI

N=number of subjects; M=mean; SD=standard deviation; p=significance threshold ( $p<0.05$ =statistical significance); SI=statistically insignificant; d=Cohen index;

Taking into consideration the fact that at a value  $d=0.2$  the values of the determination coefficient  $r^2 = 0.01$  and  $r = 0.1$ , this shows that for 100 individuals from 1000 the program is efficient, managing to increase the level of social and emotional wellbeing.

In the case of *personal factors* which contribute to the increase of social and emotional wellbeing, differences between the mean of the results obtained in the pretest and posttest stage are statistically significant on the experimental group, at the scale level of "personal factors"  $t(114) = -2.86$ ,  $p < 0.05$ , as well as "resilience" subscale level  $t(114) = 3.92$ ,  $p < 0.02$ ; "social"  $t(114) = -2.95$ ,  $p < 0.004$ ; "work"  $t(114) = -2.29$ ,  $p < 0.02$  (see Table 17).

Table 17

*Pre-post test comparisons on the experimental and control group regarding personal factors of social and emotional wellbeing*

Variables	Experimental group (N=115)					Control group (117)			
	Pretest	Posttest	t	p	d	Pretest	Posttest	t	p
Personal factors	M=64.90	M=65.75	-2.86	0.005	-0.27	M=63.87	M=63.92	-0.13	SI
(Total)	SD=12.77	SD=12.27				SD=12.61	SD=12.17		
<i>Rezilience</i>	M=19.88	M=20.34	-3.92	0.02	-0.37	M=19.27	M=19.34	-0.85	SI
	SD=4.72	SD=3.72				SD=4.67	SD=4.6		
<i>Social</i>	M=26.63	M=26.87	-2.95	0.004	-0.28	M=25.73	M=25.84	-0.73	SI
	SD=4.94	SD=4.88				SD=5.58	SD=5.45		
<i>Work</i>	M=18.78	M=18.96	-2.29	0.02	-0.22	M=18.81	M=19.06	-1.22	SI
	SD=4.53	SD=4.47				SD=5.11	SD=5.17		

N=number of subjects; M=mean; SD=standard deviation; p=significance threshold ( $p < 0.05$ =statistical significance); SI=statistically insignificant; d=Cohen index;

On the basis of Cohen's index (see Table 17) it can be asserted that in these situations the size effect is low in the case of "personal factor" scale, "social" and "work" subscale which suggest that these results do not hold a practical significance. In the case of the "resilience" subscale the size effect is almost average. It is unlikely to have occurred by chance, therefore, practically important.

Taking into consideration the values of  $r^2$  corresponding to the values of  $d$ , it can be observed that: at the "personal factor" scale  $r^2 = 0.018$ , and  $r = 0.134$ , at the "resilience" subscale  $r^2 = 0.034$ , and  $r = 0.184$ , at the "social" subscale  $r^2 = 0.02$ , and  $r = 0.141$ , at the "work" subscale  $r^2 = 0.013$ , and  $r = 0.114$ . These values indicate the fact that the intervention is efficient, managing to develop the personal factors that contribute to the increase of social and emotional wellbeing for a number higher than 100 individuals from 1000. It is to be remarked that the program develops very well "resilience" (coping abilities and rational attitudes for emotional adjustment and behavioral control regarding (anger, depression, resilience to frustration, excessive anxiety, procrastination) for which the program gives results for a number of 184 individuals from 1000.

As can be seen from Table 18 in the case of external factors (family and school) which contribute to the increase of social and emotional wellbeing the influence of the "school" factor on social and emotional wellbeing was significantly higher in the posttest stage than the pretest stage at the experimental school  $t(114) = -2.59$ ,  $p < 0.02$ .



Table 18

*Pre-posttest comparisons on the experimental and control group regarding the external factors of social and emotional wellbeing*

Variables	Experimental group (N=115)					Control group (117)				
	Pretest	Posttest	t	p	d	Pretest	Posttest	t	p	
<b>External factors (Total)</b>	M=77.58 SD=16.65	M=77.62 SD=16.17	-0.16	SI	-	M=74.95 SD=19.44	M=75.09 SD=19.34	-0.79	SI	
<i>Family</i>	M=31.94 SD=7.79	M=31.82 SD=7.67	0.65	SI	-	M=30.93 SD=9.86	M=31.05 SD=9.84	-1.43	SI	
<i>School</i>	M=30.97 SD=7.21	M=31.22 SD=6.98	-2.39	0.02	-	M=29.34 SD=7.73	M=29.39 SD=7.76	-1	SI	

N=number of subjects; M=mean; SD=standard deviation; p=significance threshold ( $p < 0.05$ =statistical significance); SI=statistically insignificant; d=Cohen index;

Analyzing the size effect on the "school" subscale which has a low intensity, it can be asserted that these results do not hold practical importance. However, the values of  $r^2 = 0.013$  and  $r = 0.114$ , indicate that school influences social and emotional wellbeing on a number of 114 students from 1000.

#### **4.7.5.3. Efficacy evaluation of The Anti-aggressivity Program in School regarding the reduction of bullying, victimization manifestations and increasing the frequency of positive behaviors**

**Hypothesis 3.** Students from the school where *the anti-aggressivity program* was implemented will be significantly less involved in bullying and will manifest an increase in positive behaviors compared to students from the school where the program was not implemented.

*Assessing the significance of the difference between average pre-posttest and size effect, in the experimental and control group, on bullying behavior, victimization, pro-social behaviors.*

Referring to the frequency of aggressive behavior on repetitive abuse (bullying), victimization and prosocial behavior, even if the results are generally expected, particularly those related to the frequency of aggressive repetitive abuse behavior (bullying) and victimization, which showed an decreased in the posttest phase in comparison to the pretest phase in the experimental group and increased their frequency in the control group; there are no statistically significant differences between pretest phase and the posttest in the two groups regarding these issues (see Table 19).

Obtain results which show no statistically significant effect size did not require identification in this case.

Table 19

*Pre-posttest comparisons on the experimental and control group regarding the frequency of violent behavior*

Variables	Experimental group (N=115)			Control group (117)		
	Pretest	Posttest	p	Pretest	Posttest	p
<b>Bullying</b>	M=5.88 SD=5.17	M=5.38 SD=4.82	SI	M=7.02 SD=4.48	M=7.08 SD=4.99	SI
<b>Victimization</b>	M=7.79 SD=6.18	M=7.43 SD=5.42	SI	M=7.47 SD=5.49	M=7.57 SD=4.98	SI
<b>Pro-social behavior</b>	M=13.34 SD=5.27	M=13.48 SD=4.84	SI	M=15.77 SD=4.74	M=15.82 SD=4.37	SI

N=number of subjects; M=mean; SD=standard deviation; p=significance threshold ( $p < 0.05$ =statistical significance); SI=statistically insignificant.

#### 4.7.5.4. Assessing the effectiveness of Anti-aggression Program in schools regarding the reduction of violent manifestations.

**Hypothesis 4.** Students/Pupils from schools who attended the Anti-aggression Intervention Program will be significantly less involved in violent acts at school than students who did not apply to this program.

*Evaluation of the difference significance between the pre-posttest averages and the size effect on the experimental and control group regarding violent manifestations*

According to Table 20 on the experimental group the frequency of violent manifestations has decreased in the posttest stage compared to the pretest stage. On the control group the frequency of the forms of violent behavior has increased in the posttest stage comparing to the pretest stage in the majority of the cases (Beldean-Galea, Țigan, Stan, & Dobrea, 2012).

In the case of "hitting or shoving from the school personnel" (item 15) the frequency of these violent manifestations has significantly decreased on both groups. At the same time, the size effect is of low intensity suggesting that the results do not hold a practical importance. This ensues from the fact that even on the control group the frequency of these behaviors has significantly decreased. Another possible explanation could be that the school personnel being informed of the conducting study have tried to minimize these behaviors.

Table 20

*Pre-posttest comparisons to experimental and control group on the frequency of violent behavior*

Variables	Experimental group (N=121)					Control group (140)			
	Pretest	Posttest	t	p	d	Pretest	Posttest	t	p
1. Impact or intentionally kicked	M=0.95 SD=0.72	M=0.86 SD=0.72	2.582	0.01	0.23	M=0.91 SD=0.74	M=0.87 SD=0.76	0.925	SI
2. Impact with intent to cause harm	M=0.61 SD=0.77	M=0.57 SD=0.69	1.043	SI	-	M=0.4 SD=0.60	M=0.42 SD=0.62	-0.576	SI
3. Ownership blunt objects	M=0.14 SD=0.40	M=0.09 SD=0.30	1.747	SI	-	M=0.10 SD=0.38	M=0.08 SD=0.35	0.499	SI
4. Use of blunt objects in order to strike	M=0.20 SD=0.44	M=0.14 SD=0.4	1.122	SI	-	M=0.22 SD=0.46	M=0.23 SD=0.49	-0.377	SI
5. Medical care after altercations	M=0.10 SD=0.33	M=0.09 SD=0.29	1.420	SI	-	M=0.08 SD=0.29	M=0.06 SD=0.23	1.744	SI

6. Theft of personal items	M=0.30 SD=0.54	M=0.24 SD=0.45	1.906	SI	-	M=0.23 SD=0.47	M=0.25 SD=0.47	-0.576	SI
7. Holding and carrying a knife by students	M=0.08 SD=0.31	M=0.05 SD=0.25	1.268	SI	-	M=0.15 SD=0.44	M=0.14 SD=0.45	-0.192	SI
8. Threat from other students	M=0.58 SD=0.69	M=0.42 SD=0.61	3.718	0.000	0.34	M=0.43 SD=0.61	M=0.41 SD=0.63	0.492	SI
9. Injuries from other students	M=1.27 SD=0.76	M=1.11 SD=0.73	3.344	0.001	0.3	M=0.94 SD=0.70	M=0.96 SD=0.73	-0.729	SI
10. Insults from other students	M=0.98 SD=0.81	M=0.94 SD=0.78	0.928	SI	-	M=0.62 SD=0.65	M=0.61 SD=0.66	0.425	SI
11. Threatening with a knife by a pupil	M=0.11 SD=0.38	M=0.07 SD=0.29	1.070	SI	-	M=0.07 SD=0.30	M=0.06 SD=0.26	0.576	SI
12. Threats from a group of students from school	M=0.47 SD=0.68	M=0.36 SD=0.62	2.379	0.02	0.22	M=0.33 SD=0.59	M=0.42 SD=0.67	-2.302	0,02
13. Blackmail in the form of money or other valuables from a student	M=0.11 SD=0.36	M=0.07 SD=0.29	1.644	SI	-	M=0.04 SD=0.27	M=0.06 SD=0.31	-1.000	SI
14. Insults from school staff.	M=0.36 SD=0.63	M=0.34 SD=0.62	0.687	SI	-	M=0.17 SD=0.48	M=0.16 SD=0.46	0.576	SI
15. Hitting or shoving by school staff	M=0.23 SD=0.51	M=0.14 SD=0.37	2.582	0.01	0.23	M=0.11 SD=0.39	M=0.05 SD=0.22	2.166	0,03
16. Sexual harassment by school personnel	M=0.05 SD=0.18	M=0.04 SD=0.28	0.420	SI	-	M=0.02 SD=0.14	M=0.03 SD=0.18	-1.419	SI
17. Sexual harassment by a student	M=0.08 SD=0.35	M=0.04 SD=0.24	1.679	SI	-	M=0.01 SD=0.12	M=0.03 SD=0.16	-1.419	SI
18. Holding blunt objects at the school	M=0.02 SD=0.15	M=0.01 SD=0.13	0.570	SI	-	M=0.04 SD=0.25	M=0.05 SD=0.27	-1.000	SI

N=number of subjects; M=mean; SD=standard deviation; p=significance threshold ( $p < 0.05$ =statistical significance); SI=statistically insignificant; d=Cohen index;

Regarding "received threatenings from a group of students" (Item 12) the frequency of these has decreased significantly in the posttest stage on the experimental group, while on the control group the frequency has significantly increased. In this case, even if the size effect is of low intensity, we can assert that the intervention is efficient. If we take into consideration the fact that at a d value of 0.22 the coefficient of determination  $r^2=0.013$  and  $r=0.0114$ , we can assert that on 114 students from 1000 the frequency of "received threatenings from a group of students on other students" (Item 12) decreases after conducting the intervention, which represents a good result.

Other statistically significant results on the experimental school were obtained in the case of "intentional hitting or shoving", "received threatenings from other students", "insults from other students".

Decreased intensities of the size effect were obtained for "intentional hitting or shoving", which show that although statistically significant, the results do not hold great practical importance. However, we can assert that after the intervention 114 students from 1000 are not anymore intentionally hit or shoved by others ( $r^2=0.022$ ,  $r=0.148$ ).

In the case of "threatenings from other students" (Item 8) and "insults from other students" (Item 9) the values of the size effect are close to the mean which asserts that the effect seems to be important from a practical point of view. Also, this fact is supported by values of the determination coefficient  $r^2$  which have the following values for the two items: Item 8 -  $r^2=0.029$ ,  $r=0.170$ ; Item 9 -  $r^2=0.022$ ,  $r=0.148$ .

#### 4.7.5.5. Efficiency evaluation of The Anti-aggressivity program in School regarding the improvement of the school environment

**Hypothesis 4.** At the school where *the anti-aggressivity program* was implemented the school environment will improve significantly after the intervention compared to the school where the program was not applied.

*Evaluation of the difference significance between the pre-posttest means and the size effect on the experimental and control group regarding the school environment.*

According to results from Table 21 the frequency of "cuss words addressed to teachers" (Item1) has significantly decreased in the posttest stage compared to pretest on the experimental group. However, the frequency of the situations in which teachers "employ measures to successfully calm down violent students" (Item 6), "are interested that violent events to not occur" (Item 7) and "reducing vandalism acts" (Item 8), "manage to command and control students violent behavior" (Item 9) has significantly increased in the posttest stage compared to pretest on the experimental group.

Table 21

*Pre-posttest comparison on the experimental and control group regarding school environment*

Variabes	Experimental group (N=121)					Control group (N=140)				
	Pretest	Posttest	t	p	d	Pretest	Posttest	t	p	
1. At the school where I study, there is a problem with cuss words teachers by students.	M=0.61 SD=0.73	M=0.39 SD=0.60	5.17	0.000	0.47	M=0.41 SD=0.65	M=0.37 SD=0.65	0.80	NS	
2. Students vandalize and/or devastate classrooms and other places in the school.	M=0.58 SD=0.78	M=0.45 SD=0.64	1.89	NS	-	M=0.41 SD=0.64	M=0.39 SD=0.65	0.62	NS	
3. Students consume alcohol.	M=0.31 SD=0.62	M=0.27 SD=0.59	1.14	NS	-	M=0.38 SD=0.66	M=0.39 SD=0.68	-0.19	NS	
4. Students using drugs.	M=0.12 SD=0.68	M=0.07 SD=0.62	1.24	NS	-	M=0.09 SD=0.36	M=0.08 SD=0.33	0.21	NS	
5. Usually I feel safe at school.	M=1.33 SD=0.84	M=1.36 SD=0.80	-0.6	NS	-	M=1.11 SD=0.89	M=1.07 SD=0.84	0.9	NS	
6. Teachers successfully calm the violent students which creates problems.	M=1.15 SD=0.79	M=1.30 SD=0.75	-2.36	0.02	-0.22	M=1.00 SD=0.86	M=0.98 SD=0.86	0.34	NS	
7. Teachers are interested that violent events to not occur.	M=1.40 SD=0.80	M=1.52 SD=0.68	-2.09	0.03	-0.19	M=1.24 SD=0.90	M=1.26 SD=0.83	-0.47	NS	
8. Teachers employ measures for reducing acts of vandalism	M=1.48 SD=0.78	M=1.64 SD=0.62	-2.44	0.2	-0.22	M=1.28 SD=0.84	M=1.29 SD=0.81	-0.16	NS	
9. Teachers manage to command and control students violent behavior	M=1.17 SD=0.76	M=1.33 SD=0.79	-2.99	0.003	-0.27	M=1.17 SD=0.83	M=1.09 SD=0.78	1.82	NS	

N=number of subjects; M=mean; SD=standard deviation; p=significance threshold ( $p < 0.05$ =statistical significance); SI=statistically insignificant; d=Cohen index.

The highest value of the size effect ( $d = 0.47$ ) was obtained in the case of "cuss words addressed to teachers" frequency. This suggests an effect of medium intensity, and thus indicate that the effect seems to be important from a practical point of view (Table 21).

In the case of positive indexes of school environment (items 6, 7, 8, 9) in which significant increases were obtained in the posttest stage compared to the pretest stage, the size effect displays a low intensity which indicates the fact that although statistically significant, the results do not hold great practical importance. However, if we take into consideration the

values of the determination coefficients  $r^2$ , we can assert that after the intervention 95 students from 1000 consider that "teachers are interested that violent events to not occur." (Item 7 -  $r^2 = 0.009$ ,  $r = 0.095$ ); 109 students from 1000 consider that "Teachers successfully calm the violent students which creates problems." (Item 6 -  $r^2 = 0.012$ ,  $r = 0.109$ ); 109 students from 1000 consider that "teachers employ measures for reducing acts of vandalism" (Item 8 -  $r^2 = 0.012$ ,  $r = 0.109$ ) and 134 students from 1000 consider that "teachers manage to command and control students violent behavior" (Item 9 -  $r^2 = 0.018$ ,  $r = 0.134$ ).

On the control group even if the results did not go in the desired direction (decrease of positive indexes and increase of the negative indexes in the posttest stage compared to the pretest stage) indeed statistically significant differences were not recorded.

#### 4.7.6. Discussions and conclusions

The obtained results support the research hypothesis according to which along with the development of social and emotional abilities of the students, the social and emotional wellbeing will be improved, thus, the frequency of violent manifestations, bullying, victimization will decrease and positive behavior will increase.

This hypothesis is based on the results of the study conducted by Bernard, Stephanon and Urbach (2007) according to which a decrease in the social and emotional wellbeing of the students increased the probability of emergence of varied problems.

Social and emotional wellbeing improved at the school where the *anti-aggressivity program* has been implemented, especially in the emotional area, compared to the wellbeing of the students where the program has not been implemented.

The increase of the social and emotional wellbeing from the experimental group has been influenced firstly by the significant development of the personal factors, like: a significantly higher level of resilience - ability to cope with stress and rational attitudes for emotional adjustment and behavioral control regarding anger, depression, resilience to frustration, excessive anxiety, procrastination; a significantly higher level of social abilities - cooperative spirit (empathy, resolving conflicts, ability to make friends and values (honesty, integrity, fairness, responsibility, politeness, respecting promises, working hard); a higher level of trust, perseverance and time management.

Secondly, the increase of social and emotional wellbeing after the intervention at the experimental school was influenced by the external factor "school" (tutors) which was significantly involved in activities that targeted social and emotional abilities. A significant involvement of the external factor - "family" (parents) was not obtained regarding the development of social and emotional abilities of their children. The reasons why the involvement of the parents is low could be the following: low social-cultural background, the absence of the parents on a more or less lengthy period of time. In the same time, the distribution of the brochure - *parents journal* did not determine a stronger involvement than usual in their relationship with their child.

This fact suggests that the obtained results of this study could be due to the *lessons taught by tutors* component - "*Program Achieve. You Can Do It!*" and less due to the *parents journal* component.

The obtained results showed that although the tutors from the school in which The "Anti-aggressivity Program" was implemented were interested to stop violent events, taking prevention and control measures, in some cases significant results were not obtained.

Therefore, the frequency of bullying, victimization, positive behavior, certain forms of violence, as well as behavioral, social and educational wellbeing were not significantly modified at this school after the implementation of "The Anti-aggressivity Program".

However, generally, in these cases, the obtained results have the desired direction - the frequency of bullying, victimization has decreased on the experimental group, whereas on the control group it has decreased; wellbeing has increased at the experimental school, while it has decreased at the control school; the frequency of violent manifestations has decreased after the intervention at the experimental group, while at the control groups many forms of this behavior have increased.

There are several situations in which the results have not the expected direction (e.g. educational wellbeing has decreased both in the experimental and control group). These situations could be explained by the fact that the intervention has been conducted on a short period of time, not managing to achieve all the proposed goals. Another explication can be given by Cowie and Olafsson (2000) who assert that when the interventions are implemented, bullying behavior seems to amplify due to an increased awareness, even if in reality no increase of these behaviors has emerged.

An aspect that has drawn attention was that from the perspective of the violence victims, the frequency of several forms of violence has significantly decreased after the application of The Anti-aggressivity Program at the experimental school, but the level of bullying reported by bullies and victims has reduced, but not significantly. Although the majority of the bullies have common traits, this situation demonstrates once again the specificity and complexity of bullying in relation with other forms of school violence (see chapter 3 of this paper) which necessitate special attention.

The size of the effect for the situations in which significant differences were obtained was generally of low intensity, which indicate the fact that although statistically significant, the results do not hold great practical importance. Sizes of the effect of average intensity were obtained in the case of the "resilience" personal factor and of the violent behavior "cuss words addressed to teachers", which suggest that the effect appears to be important from a practical point of view.

If taken into consideration the fact that reported to 1000 students, the program is generally efficient for more than 100 pupils (which is not negligible) it can be asserted that the intervention has achieved its goal.

## CHAPTER V

### FINAL CONCLUSIONS AND CONTRIBUTIONS

From the presentations of aggressivity theories, of school violence complexity which is due to diverse forms, causes, conditions, of negative consequences for both the aggressor and the victim, of difficulties that emerge in reducing the aggressive manifestations in students, it is shown that the school violence phenomenon has constituted and still constitutes a topic of interest for researchers.

According to field literature, bullying is one of the specific form of school violence. Although "bullying" is an international problem, which can lead to serious long and short term consequences, for the bully, victim and society, in Romania this form of aggressivity in school is less studied.

Overcoming the difficulties that appear when bullying behavior is studied, namely methodological aspects, like defining the term "bullying" (especially in Latin languages that lack an exact correspondent of the term) in the present paper important information was brought regarding the nature and amplitude of this specific form of violence in students from Romanian schools.

*The Student Self-Report Questionnaire* proposed by Stevens, de Bourdeaudhuij, Van Oost (2000) and adapted in this paper for Romanian students, can be employed in the evaluation of the bullying and victimization phenomenon, as well as in the study of positive behaviors as factors that increase the popularity of a student among his peers.

The practical implications of the study regarding adaptation of this questionnaire outline the employing of *The Student Self-Report Questionnaire* as a monitoring instrument of the effects of different intervention programs in school, which have as a target: diminishing the frequency of violent behaviors and increasing positive behaviors.

Through the study pertaining to the present paper, it is emphasized the fact that bullying manifestations as a specific form of school violence, represent a phenomenon which is also present in Romanian schools, similar to numerous countries. Hence, 33.8% of the surveyed students frequently manifest bullying behavior, 40.5% are frequently victimized by their peers, and 33.9% benefit from positive behaviors from their peers.

Gender differences are also observed concerning the frequency and forms of bullying. According to self-reports, girls reported indirect (verbal, manipulation and social isolation) and direct bullying more frequently than boys did.

Beside forms of bullying there have been identified other forms of violent behavior. The most often encountered among the students from the studied lot are: "insults from other students"; "intentional hitting or shoving"; threatenings from other students"; "hitting with the intention of causing harm".

Also, gender and age differences have been observed concerning certain aspects related to school violence. Therefore, girls needed more frequently medical care than boys after altercations with other students, are more frequently insulted, mocked, shoved, hit, sexually harassed by school personnel and shoved, hit or offended "immediately after class". Students from lower grades (5<sup>th</sup> and 6<sup>th</sup>) are more frequently threatened, shoved or hit than those from higher grades (7<sup>th</sup> and 8<sup>th</sup>), and the probability of being the target of violent manifestations are increased than those from higher grades (7<sup>th</sup> and 8<sup>th</sup>). The frequency of

students who have remarked that another student carried a weapon is increased in higher grades (7<sup>th</sup> and 8<sup>th</sup>) compared to those from lower grades (5<sup>th</sup> and 6<sup>th</sup>).

The present study provides evidence that confirm the specific, distinctive character of the student categories classified as "bullies", "victims", "bully/victims" regarding social and emotional traits and psychosocial adjustment. Taking into account the student self-reports and the parent and teacher reports it has been found that *victims* and *bully/victims* have the poorest psychosocial functioning.

In respect that students from the bullying and victim category are at risk of having psychosocial adjustment problems and a low level of social and emotional wellbeing it was considered necessary to take prevention and reduction measures of these violent manifestations in school. Hence, it was opted for the efficacy testing of "The Anti-aggressivity Program in School" which targets the development of social and emotional abilities of bullies, victims and those uninvolved in these types of behaviors.

This study provides arguments that confirm the fact that developing strategies of social and emotional abilities increase the level of social and emotional wellbeing, and implicitly lead to a decrease of violent manifestations. After applying "The Anti-aggressivity Program in School" the students from the experimental group have showed: a higher level of adjusting to stress and rational attitudes for emotional adjustment and behavioral control regarding anger, depression, resilience to frustration, excessive anxiety, procrastination; a significantly higher level of social abilities - cooperative spirit (empathy, resolving conflicts, ability to make friends) and values (honesty, integrity, fairness, tolerating others, responsibility, politeness, respecting promises, work hard); a higher level of trust, perseverance and time management.

"The Anti-aggressivity Program in School" employed in this study targeted the development of social and emotional abilities through the influence of the "school" factor (lessons taught by tutors from the "Program Achieve. You Can Do It!" Bernard (2008) and "family" factor (employing *parent journal* - which has been elaborated with the purpose of achieving the goal of the study).

Adaptation of certain lessons from "Program Achieve. You Can Do It!" Bernard (2008) to Romanian students, contribute at the addition of documentary material regarding development strategies of social and emotional abilities of students from schools of at most average category (from a social-economic-cultural point of view and school results).

Taking into account the important role of the family among personal factors, school and society in the psychosocial development of the child, the brochure *Parent Journal* was conceived, with the purpose of familiarizing parents with certain information they should acquire and once known and applied could contribute to the increase of the social and emotional wellbeing of their child.

Finally, we consider that the present paper brings benefits to school counselors and teachers who work in middle-schools and are confronted with violent problems among students, by offering information regarding the nature and amplitude of this phenomenon (particularly the bullying behavior) providing at the time an intervention model with the purpose to improve the social and emotional abilities in children.



## **LIMITATIONS AND FUTURE RESEARCH DIRECTIONS**

The following aspects represent limitations to the study:

- the selection of the subjects was not random, and the two groups (experimental and control) were constituted on the basis of natural criteria (two middle-schools);
- because of the subjects' characteristics, the results only refer to a certain category of students, namely those who have an average social-economic-cultural background at best, who attend neighborhood schools, have an average school performance and often have behavior problems;
- lack of control of certain external factors that could have influenced the results;
- putting an emphasis on the sections "Cooperation" and "Resilience" from the "Program Achieve. You Can Do It!", while section "Trust", "Perseverance" and "Time Management" have occupied a secondary place;
- the anti-aggressivity program was conducted in a relatively short period of time (approximately 5 months);
- the modality of persuading the family to get involved and teach its members how to develop the social and emotional abilities of the children was not sufficiently consistent.

The present paper, through its results, leads to the further directions of research:

- adapting the self-report questionnaire on bullying to other age levels;
- the inclusion of a higher number of schools randomly selected which would allow randomized selection in the experimental and control group, allowing the use of a experimental design (a better control of the variables);
- the study of certain aspects regarding personality traits of the bullies and victims (passive or provocative);
- the anti-aggressivity program in school to be applied in early ages and on lengthier periods of time in order to allow the equal development of the five foundations "Cooperation", "Resilience", "Trust", "Perseverance" and "Time management".
- at the same time, prevention and reduction activities of violent behaviors employed at the school and class level to overlap the activities of smaller groups and even those on the individual level.

## SELECTED BIBLIOGRAPHY

- Achenbach, T.M., & Rescorla, L.A. (2009). *Manualul ASEBA pentru vârsta școlară, chestionare și profile*. Cluj-Napoca: Editura RTS.
- Ahmad, Y.S., & Smith, P.K. (1990). Behavioural measures review: 1. Bullying in schools. *Newsletter: Association for Child Psychology & Psychiatry*, 12(4), 26–27.
- Alikasifoglu, M., Erginoz, E., Ercan, O., Uysal, O., & Albayrak-Kaymak, D. (2007). Bullying behaviours and psychosocial health: Results from a cross-sectional survey among high school students in Istanbul, Turkey. *European Journal of Pediatrics*, 166(12), 1253–1260.
- Anghel, F., Liiceanu, A., Săucan, D., & Voinea, L. (2006). Legislație privind drepturile copilului, violența și violența școlară. În: M. Jigău, A. Liiceanu, L. Preoteasa (coord.) *Violența în școală* (pp.32-44) București: Ed. Alpha MDM.
- Aniței, M. (2007). *Psihologie Experimentală*. Iași: Editura Polirom.
- Atkinson, R.L., Atkinson, R.C., Smith, E.E., & Bem, D.J. (2002). *Introducere în Psihologie*. Ediția a XI-a, Traducere din limba engleză, L.P. Băiceanu, G. Ilie, L. Gavriliță, București: Editura Tehnică.
- Baldry, A.C., & Farrington, D.P. (1999). Types of bullying among Italian school children. *Journal of Adolescence*, 2, 423–426.
- Balica, M., Fartușnic, C., Horga, I., Ionescu, M., Jigău, M., Liiceanu, A., & Măruțescu, A. (2006). Rezultatele cercetării de teren. În: M. Jigău, A. Liiceanu, L. Preoteasa (coord.) *Violența în școală* (pp.61-63) București: Ed. Alpha MDM.
- Bandura, A. (1973). *Aggression: a social learning analysis*. N-Y: Prentice-Hall, Englewood Cliffs.
- Bateson, G. (1980). *Mind and nature: a necessary unity*. N-Y: Batam Books Editor.
- Beale, A.V.(2001). Bullybusters: Using drama to empower students to take a stand against bullying behavior. *Professional School Counseling*, 4, 300-306.
- Beldean-Galea, I.E.,** & Jurcău, N. (2010). Studiul calităților psihometrice ale unui chestionar de evaluare a fenomenului “bullying” la elevi. *Revista de Psihologie Aplicată*, 12(1),15-20.
- Beldean-Galea, I.E.,** Jurcău, N., & Țigan, Șt. (2010). Frequency of Bullying Behaviours in Secondary Schools in Cluj-Napoca. *Applied Medical Informatics*, 27, 4, 62-66.
- Beldean-Galea, I.E.,** Dobrean, A.,& Stan, NC. (2012, Aprilie). *Forme ale comportamentului de tip „bullying” în școli gimnaziale din municipiul Cluj-Napoca*. Prezentare orală la Conferința Internațională “Drepturile Copiilor, Bunăstarea și Protecția Lor”, Cluj-Napoca.
- Beldean-Galea, I.E.,** Țigan, Ș., Stan, C., & Dobrean, A. (2012). Efficacy study of a primary intervention school violence program. *Applied Medical Informatics*, 31,3 (in press).
- Berkowity, L. (1974). Some determinants of impulsive aggression: the role of mediated association with reinforcements of aggression. *Psychological Review*, 81, 165-176
- Berkowitz, L. (1989). Frustration-Aggression Hypothesis: Examination and Reformulation, *Psychological Bulletin*, 106(1), 59-73
- Berkowitz, L. (1993). *It's Causes, consequences and control*. N-Y: Mc. Graw-Hill Inc.
- Bernard, M.E., Stephanon, A., & Urbach, D. (2007). *ASG Student Social and Emotional Health Report*, Australia: Camberwell Melbourne Victoria

- Bernard, M.E. (2008). *You can do it! Education. Program Achieve – A social & emotional learning curriculum*. Third Edition, Grades 5-6, Australia: Ed. Australian Council for Educational Research LTD.
- Boulton, M.J., & Smith, P.K. (1994). Bully/victim problems in middle-school children: Stability, self-perceived competence, peer perceptions and peer acceptance, *British Journal of Developmental Psychology*, 12, 315-329.
- Buș, I. (1997). *Psihologie judiciară*. Cluj-Napoca: Editura, Presa Universitară Clujeană.
- Carney, A.G., & Merrell, K.W. (2001). Bullying in schools: perspectives on understanding and preventing an international problem. *School Psychology International*, 22, 364-382.
- Carey, P.D., Walker, J.L., Rossouw, W., Seedat, S., & Stein, D.J. (2008). Risk indicators and psychopathology in traumatised children and adolescents with a history of sexual abuse. *European Child Adolescent Psychiatry*, 17, 93-98. doi: 10.1007/s00787-007-0641-0
- Center for Disease Control and Promotion (CDC). (1990). Chronic Disease and Health Promotion, Youth Risk Behavior Surveillance System (YRBSS), disponibil la <http://www.cdc.gov/chronicdisease/resources/reports.htm>
- Chelcea, S. (1996). Comportamentul prosocial. În: A. Neculau (coord.) *Psihologie socială, Aspecte contemporane* (pp.444-457). Iași: Ed. Polirom.
- Cowie, H., & Olafsson, R. (2000). The role of peer support in helping the victims of bullying in a school with high levels of aggression. *School Psychology International*, 21, 79-95
- Currie, C., Gabhainn, S.N., Godeau, E., Roberts, C., Smith, R., Currie, D., Picket, W., Richter, M., Morgan, A., & Barnekow, V. (2008). Inequalities in young people's health. HBSC international report from the 2005/2006 survey, accesibil la [http://www.euro.who.int/data/assets/pdf\\_file/0005/53852/E91416.pdf](http://www.euro.who.int/data/assets/pdf_file/0005/53852/E91416.pdf)
- Dake, J.A., Price, J.H., & Telljohann, S.K. (2003). The nature and extend of bullying at school. *Journal of School Health*, 73, 5, 173-180.
- Davis, S. (2002), <http://www.stopbullyingnow.com/yvp.htm>
- Debarbieux, E. (1991). *La violence dans la classe*. 2-e edition Paris: ESF.
- Doron, R., & Parot, F. (1999). *Dicționar de psihologie*, București: Editura Humanitas.
- Edwards, D.W., Scott, C.L., Yarvis, R.M., Paizis, C.L., & Panizzon, M.S. (2003). Impulsiveness, Impulsive Aggression, Personality Disorder, and Spousal Violence. *Violence and Victims*, 18,1, 3-14. versiunea online: <http://search.proquest.com.ux4ll8xu6v.useaccesscontrol.com/>
- Eibl-Eibesfeldt, J. (1995). *Agresivitatea umană*, București: Ed. Trei.
- Eisikowitz M. (1999). *Cauzalitate și intervenție terapeutică în comportamentul agresiv*, Teză de doctorat, Cluj-Napoca
- Eron, L.D., & Huesman, L.R. (1987) "TV as a source of maltreatment of children". *Social Psychology Review*, 16, 195-202
- Farmer, T.W., Leung, M.C., Pearl, R., Rodkin, P.C., Cadwallander, T.W., & Van Acker, R. (2002). Deviant or diverse groups? The peer affiliations of aggressive elementary students. *Journal of Educational Psychology*, 94, 611-620.
- Florea, M. (2003). *Teorii psihologice asupra agresivității*. versiune on line, <http://www.history-cluj.ro/SU/annuare/2003/Florea.htm>

- Geen, R.G. (1990). *Human Aggression*. Buckingham, Celtic Court 22 Ballmoor, UK: Open University Press, Second edition (2001). accesabil la <http://www.mcgrawhill.co.uk/openup/chapters/0335204716.pdf>
- Genta, M.L., Menesini, E., Fonzi, A., Costabile, A., & Smith, P.K. (1996). Bullies and victims in schools in central and southern Italy. *European Journal of Psychology of Education*, XI(1), 97-110.
- Haynie, D., Nanel, T., & Eitel, P. (2001). Bullies, Vistims, and bully/vistims; distinct group of a risk youth. *Journal of Early Adolescence*, 21, 29-49.
- Hăvârneanu, C., & Amorăriței, C. (2001). Agresivitatea în relația elev profesor. În: L. Șoitu, C. Hăvârneanu, *Agresivitatea în școală* (pp. 87-113). Iași: Ed. Institutul European.
- Herbert, J. (1991). *La violence a l'école. Guide de prevention et techniques d'intervention*. Montreal: Edition Logiques.
- Hollin, C.R. (1989). *Psychology and crime: An introduction to criminological psychology*. London: Publisher Routledge. accesabil la [www.questia.com](http://www.questia.com)
- Irimie, S., Mireștean, I.M., Samoilă, C., Decanovici, A., & **Beldean-Galea, I.E.** (2011, Septembrie). *Profilul de risc psiho-social în unități de învățământ*. Prezentare orală la Simpozionul Național Evaluarea și Promovarea sănătății, București.
- Irimie, S., Mireștean, I.M., Samoilă, C.A., **Beldean-Galea, I.** & Decanovici, A. (2010). Tobacco Use Among Students from Romania 2004 versus 2009 GYTS Data. *Applied Medical Informatics Original Research*, 27 (4), 55-61.
- Johnson, J.G., Cohen, P., Smailes, E., Kasen, S. et al. (2000). Adolescent personality disorders associated with violence and criminal behavior during adolescence and early adulthood. *The American Journal of Psychiatry*, 157, 9,1406-12. versiunea online: <http://search.proquest.com.ux4ll8xu6v.useaccesscontrol.com/>
- Kaltiala-Heino, R., Rimpela, M., Marttunen, M., Rimpela, A., & Rantanen, P. (1999). Bullying, depression, and suicidal ideation in Finish adolescents: school survey. *British Medical Journal*, 319, 348-351.
- Kaltiala-Heino, R., Rimpela, M., Rantanen, P., & Rimpela, A. (2000). Bullying at school – an indicator of adolescences at risk for mental disorders. *Journal of Adolescence*, 23, 661-674.
- Karly, P. 1991, *Animal and Human aggression*, Oxford University Press.
- Kim, YS, Koh, YJ, & Leventhal, BL. (2004). Prevalence of school bullying in Korean middle school students. *Archives of Pediatrics & Adolescent Medicine*, 158(8), 737-41.
- Krug, E., Dahlberg, I., Mercy J., Zwi, A. & Rafael, L. (eds.) (2002). *World Report on Violence and Health*. On line version, <http://whqlibdoc.who.int/hq/2002/9241545615.pdf> (12/08/2007).
- Kumpulainen, K., Rasanen, E., Henttonen, I., Almqvist, F., Kresanov, K., Lina, S.L., Moilanen, I., Piha, I., Puura, K. & Taminen, T. (1998). Bullying and psychiatric symtoms among elementary school-age children. *Child Abuse & Negleght*, 22, 705-717.
- Kumpulainen, K., Rasanen, E., & Puura, K. (2001). Psychiatric disorders and the use of mental health services among children involved in bullying. *Aggressive Behavior*, 27, 102-110.

- Lagerspetz, K.M.J., Björkqvist, K., & Peltonen, T. (1988). Is indirect aggression typical of females? Gender differences in 11- to 12-year old children. *Aggressive Behavior*, 14, 403-414.
- Lang, A.R., Goeckner, D.J., Adesso, V.J., & Marlatt, G.A. (1975). Effects of alcohol on aggression in male social drinkers. *Journal of Abnormal Psychology*, 84, 508-518.
- Limber, SP. (2002). Addressing Youth Bullying Behaviour. in: M. Fleming, K. Towey K. (eds.) *Educational Forum on Adolescent Health: Youth Bullying* (p. 4-18). Versiunea On line, <http://www.ama-assm.org/ama1/pub/upload/mm/39/youthbullying.pdf>.
- Mednick, S.A., & Hutchings, B. (1978). [Genetic and Psychophysiological Factors in Asocial Behavior](#). *Journal of the American Academy of Child Psychiatry*, 17(2), 209-223.
- Mireștean, I., Irimie, S., Samoilă, C., Mireștean, St., Pop, V., & **Beldean-Galea, I.** (2002). Aspecte ale consumului de droguri la adolescenții din România date extrase din PN10 – rezultate pentru anul 2000, *Simpozionul Profilaxia – strategia principală a sănătății publice*, (pp. 210-216). Chișinău: Centrul Editorial Poligrafic Medicina.
- Mireștean, I., Irimie, S., Samoilă, C., Mireștean, S., Pop, V., & **Beldean-Galea, I.** (2003a). Aspecte ale consumului de droguri la liceenii din România. În Iftene F. (editor). *Copilul din umbră, unele aspecte ale maltratării, abandonului, adicției*, (pp. 83-92). Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Cluj-Napoca.
- Mireștean, I., Irimie, S., Samoilă, C., Mireștean, St., Pop, V., & **Beldean-Galea, I.** (2003b). Maltratarea fizică a elevilor în familie – factor de risc asupra dezvoltării psihice. În Iftene F. (editor). *Copilul din umbră, unele aspecte ale maltratării, abandonului, adicției* (pp. 247- 254). Universitatea de Medicină și Farmacie „Iuliu Hațieganu”, Cluj-Napoca.
- Mireștean, I.M., Irimie, S., Samoilă, C., & **Beldean-Galea, I.**, Decanovici, A. (2011). *Utilizarea metodei cotării și scorării riscului în epidemiologia comportamentală*. Prezentare orală la Simpozionul Național „Evaluarea și Promovarea sănătății”, București.
- Molnar, B.E., Berkman, L.F., & Buka, S.L. (2001). Psychopathology, childhood sexual abuse and other childhood adversities: relative links to subsequent suicidal behaviour in the US. *Psychological Medicine*, 31(6), 965-77.
- Moser, G. (1987). *L'agression*. Paris: Presses universitaires de France.
- Nansel, R.T., Overpeck, M., Pilla, R.S., Ruan, W.J., Simons-Morton, B., & Scheidt, P. (2001). Bullying Behaviors Among US Youth: Prevalence and Association with Psychosocial Adjustment. *Journal of the American Medical Association*, 285(16), 2094-2110. On line version, URL: <http://jama.ama-assn.org/cgi/content/full/285/16/2094>.
- Nansel, T.R., Crayig, W., Overpeck, M.D., Saluja, G., & Ruan, J. (2004). Cross-national consistency in the relationship between bullying behaviours and psychosocial adjustment. *Archives of Pediatrics and Adolescents*, 158(8), 730-746.
- Neamțu, C. (2003). *Devianța școlară - Ghid de intervenție în cazul problemelor de comportament ale elevilor*. Iași: Ed. Polirom.
- Olweus, D. (1991). Bully/victim problems among school children: Basic facts and effects of a school based intervention program. In D. Pepler & K. H. Rubin (coord.), *The Development and Treatment of Childhood Aggression*, N.J.: Lawrence Erlbaum, Hillsdale

- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. New-York: Wiley-Blackwell
- Olweus, D. (1999). Sweden. In P.K. Smith, Y. Morita, J. Junger-Tas, D. Olweus, R. Catalano, and P. Slee, *The Nature of School Bullying: A Cross-National Perspective* ( pp. 7–21). London, UK: Publisher Routledge, Taylor & Francis Group, accesabil la: [http://books.google.ca/books?id=Fj6i8AHNT5AC&printsec=frontcover&hl=ro&source=gbs\\_ge\\_summary\\_r&cad=0#v=onepage&q&f=false](http://books.google.ca/books?id=Fj6i8AHNT5AC&printsec=frontcover&hl=ro&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false)
- Patterson, G.R., Littman, R.A., & Bricker, W. (1967). Assertive behavior in children: A step toward a theory of aggression. *Monographs of the Society for Research in Child Development*, 35(5), iii-iv+1-43.
- Pepler, D. J., Craig, W. M., Ziegler, S., & Charach, A. (1994). An evaluation of an anti-bullying intervention in Toronto schools. *Canadian Journal of Community Mental Health*, 13, 95-110.
- Preda, V. (1998). *Delicvența juvenilă o abordare multidisciplinară*. Cluj-Napoca: Presa Universitară Clujeană.
- Ramirez, J.M. (2000). Animal models in the research of human aggression. *Aggression and Violent Behavior*, 5 (3), 281-290
- Ramirez, J.M. (2012). The educational Task of overcoming Violence. In: J.M. Ramirez, *Human aggression: a multifaceted phenomenon* (pp.118-139), versiune on-line, accesabil la: [http://eprints.ucm.es/10003/1/Human\\_Aggression\\_Book.pdf](http://eprints.ucm.es/10003/1/Human_Aggression_Book.pdf)
- Reinisch, J.M., & Sanders, S.A. (1982). Early barbiturate exposure: The brain, sexually dimorphic behavior and learning, *Neuroscience & Biobehavioral Reviews*, 6(3), 311-319.
- Rigby, K., & Slee, P.T. (1991). Bullying among Australian school children: reported behaviour and attitudes to victims. *Journal of Social Psychology*. 131, 615-627.
- Rigby, K., & Cox, I.K. (1996). The contributions of bullying and low self-esteem to acts of delinquency among Australian teenagers. *Personality and Individual Differences*, 21, 609-612.
- Rigby, K. (1996). *Bullying in school: What To Do About It*, Melbourne: Australian Council for Education Research Limited.
- Rivers, I., & Smith, P.K. (1994). Types of bullying behaviour and their correlates. *Aggressive Behaviors*, 20, 359-368
- Roșan, A. (2009). *Comportamentul violent-screening și strategii de intervenție*. Cluj-Napoca: Editura Alma Mater.
- Salmivalli, C., Lagerspetz, K., Björkqvist, K., Österman, K., & Kaukiainen, A. (1996). Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behavior*, 22, 1–15.
- Salmivalli, C. (2004). Consequences of School Bullying and violence. In E. Munthe, E. Solli, E. Ytre-Arne, & E. Roland, (Eds), *Taking fear out of schools* (pp. 29-35). Stavanger, Norway, accesabil: <http://saf.uis.no/getfile.php/SAF/Til%20nedlast/Taking%20Fear%20out%20of%20Schools.pdf>
- Sava, F. (2004). *Analiza datelor în cercetarea psihologică. Metode statistice complementare*. Cluj-Napoca: Editura ASCR.

- Scheithauer, H., Hayer, T., Petermann, F., & Jugert, G. (2006). Physical, Verbal, and Relational Forms of Bullying Among German Students: Age Trends, Gender Differences, and Correlates. *Aggressive Behavior*, 32, 261-275.
- Sharp, S. & Smith, P.K. (1991). Bullying in UK schools: The DES Sheffield project. *Early Child Development and Care*, 77(1), 47-55
- Smith, P.K., Cowie, H., Olafsson, R.F., & Liefhoghe P.D. (2002). Definition of bullying: A comparison of terms used, and age and gender differences, in a fourteen-country international comparison. *Child Development*, 73(4), 1119-1133.
- Smokowski, P.R., & Kopasz, K.H. (2005), Bullying in School: An Overview of Type s, Effects, Family Characteristics, and Intervention Strategies. *Children & School*, 27 (2), 101-110.
- Srabstein, J.C., McCarter, R.J., Shao, C., & Huang, Z.J. (2006). Morbidities associated with bullying behaviors in adolescents. School based study of American adolescents. *International Journal of Adolescent Medicine and Health*, 18, 587-96.
- Steele, C. M., & Joseph, R. A., (1990). Alcohol myopia: Its prized and dangerous effects. *American Psychologist*, 45, 921-933.
- Stevens, V., de Bourdeaudhuij, I., & Van Oost, P. (2000). Bullying in Flemish schools: An evaluation of anti-Bullying intervention in primary and secondary schools. *British Journal of Educational Psychology*, 70, 195-210.
- Stevens, V., Van Oost, P., & de Bourdeaudhuij, I. (2000). The effect of an antibullying intervention programme on peers attitudes and behavior, *Journal of Adolescence*, 23, 21-34.
- Stevens, V., de Bourdeaudhuij, I., & Van Oost, P. (2001). Anti-bullying intervention at school: aspects of programme adaptation and critical issues for further programme development. *Health Promotion International*, 16, 155-167.
- Whitney, I. & Smith, P.K. (1993). A survey of the nature and extent of bullying in primary and secondary schools. *Educational Research*, 35, 34-39.
- Williams, K., Chambers, M., Logan, S., & Robinson, D., (1996). Association of common health symptoms with bullying in primary school children. *British Medical Journal*, 313, 17-19.
- Williams, K.R., & Guerra, N.G., Ed, D. (2007). Bullying Prevalence and Predictors of Internet. *Journal of Adolescent Health*, 41, S14-S21
- Zapan, G. (1984). Cunoașterea și aprecierea obiectivă a personalității. București: Editura Academiei.