# Bullying Prevention in Primary Education: A Social Work Intervention with Students

**Irene Katsama**
Assistant Professor
Department of Social Administration and Political Science
Democritus University of Thrace
Greece

**Elli Bourmpaki**
MSc, Statistician, Data Analyst
School of Population Sciences and Health Services Research
Faculty of Life Sciences and Medicine
King's College London, UK

## Abstract

*The present article focuses on the prevention of school bullying. The phenomenon of bullying among students has been studied in four Greek intercultural primary schools. There was a thorough examination of the influence of characteristics such as - gender, class, country of birth, presence of parents, mean score of grades, educational level of the father, birth order in the family, school performance, peer relationships, physical appearance, athletic competence, conduct-behaviour and self-esteem to the involvement in bullying incidents from the roles of Bully - Victim – Bystanders - Uninvolved. A school social work intervention has been designed, implemented and evaluated. System's theory and Strength's based model consist the main theoretical framework while Group Social Work was the methodology of practice. The objective was the student's enhancement of personal and social skills, as they consist of protective factors according to the results of the present study and the literature review, aiming at conflict resolution. Alternatively, in order to reverse the traditional way of problem solving (focus on the problem) the intervention focused on the strengths and abilities of the individuals (Strength's based model). A before- after evaluation of the social work intervention reported students' positive impact on personal and social skills, concerning factors such as: life in the school and classroom (conduct- behaviour), relationships in the family, communication among classmates and friends (peer relationships) and perceived physical appearance, pointing out that they had the opportunity to cope with conflict in alternative ways, feeling at the same time appreciated.*

*Keywords* : school social work,  school bullying, personal and social skills, gender, ethnic diversity

## *Background*

Bullying among schoolchildren is certainly a very old phenomenon, but it was not until the early 1970s when it became the object of systematic research. Olweus, (1993) provided a holistic definition of the phenomenon of bullying within the school environment: a student is being bullied or victimized when he/she is exposed, repeatedly and over time to negative actions on the part of one or more other students. Negative action is when someone intentionally inflicts, or attempts to inflict, injury or discomfort upon another. This definition of bullying became the basis for the development of a worldwide research activity on school bullying (e.g: Stevens, De Bourdeaudhuij, & Van Oost, 2000,  Rigby & Smith 2011, Vaillancourt et al., 2013, Chen & Ho, 2015, Hymel & Swearer, 2015,  Espelage & Swearer, 2004). According to the above studies, bullying is a significant educational problem in many countries which can impair the school's effectiveness. Over the last years, the phenomenon of bullying in primary schools of Greece has become an issue of significant concern. Recent research studies in primary schools (a number of empirical studies have been carried out over the last two decades in Greece, eg.Pateraki & Houndoumadi, 2001, Andreou et al. 2007, Deliyianni, 2005, Georgiou & Stavrinides, 2008, Kokkinos & Panayiotou, 2004, Sapouna, 2008, Katsigiannis, 2006, Psalti & Konstantinou, 2007, Giannakopoulou et al., 2010) have shown that 10% of Greek students are being subjected to peer victimization.

Bullying has a negative effect on the development of positive self-esteem in its victims, who frequently blame themselves for what is happening to them. This attitude affects their concentration and learning (Olweus, 2009, Rigby & Smith, 2011). According to Craig & Pepler, (1998), the bystanders of bullying incidents also suffer consequences. Their fear, the avoidance of participation and their ambivalence whether to report the incident leads to anxiety and cognitive conflict, which in the long term have negative effects in mental health. Bullies are also reported to suffer from emotional and behavioural difficulties, (Olweus, 2009). Literature review of Kowalski et al., (2008), Olweus, (2009), Rigby & Smith, (2011), Bibou- Nakou et al,( 2012),  has shown that anxiety, depression and low self -image are risk factors for bullying behavior. Victims are more withdrawn, isolated, with limited leadership skills, lack of cooperativeness and low self-esteem. The above writers indicate as protective factors: positive social relationships, family intimacy, positive behavior and high self-esteem. School consists of a context where attitudes are cultivated and expressed. In this respect, it seems to be the most appropriate environment for the implementation of interventions based on social work theories and practices. Over the last years, preventive interventions based on community, family, school, classrooms, group of peers and individuals have been implemented in Greece, (Galanaki, 2010). An increase of bullying incidents within primary school children indicates the lack of professionals working in Greek schools such as social workers or psychologists and the need of planning and implementing interventions, which aim at the prevention and management of the phenomenon during early adolescence. Internationally, social work has a broad scope of practices in all grades of education. The tradition and culture of each country affects practices of social work. Recently, a connection between social work, social pedagogy and school social work is implemented in countries as United Kingdom, France, Germany and the Netherlands (Lorenz, 2008, Hatton, 2008). Hatton, (2008), underlies the significance of creativity as a strategy for the improvement of provided services at schools and emphasizes at the cultivation of personal and social skills through the participation in social work groups. A personal development, a self-esteem improvement and the social inclusion contribute to the promotion of children's mental health.

## *Aim*

The aim of the research focused initially on the exploration of the phenomenon of bullying in four different multicultural primary schools in Greece, during a certain period of time, (February 2011- February 2012).  The study explores the attitudes and behaviors of students towards the phenomenon of bullying in school and applies a social work intervention, based on research findings, aiming at the enhancement of personal and social skills of students; which contribute to the prevention and management of bullying incidents.

The main research questions were:

- Is there any possible correlation between levels of self-esteem with the involvement in bullying?
- Does a group social work intervention influence the resolution and prevention of bullying, by contributing to the enhancement of student's self-esteem and self-image and to the development of communication skills?

## *Materials & Data Collection*

The research conducted from February 2011 until June 2011 in two primary schools in Attica, a cross-cultural primary school[1] (School A[2]) and a general primary school with multicultural population, (School B). During the period September 2011- February 2012, an equivalent research was also performed in two cross-cultural schools (mentioned as School C and D), at the north part of Greece; Thrace, in two different small cities with Muslim population[3].

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[1] It was back in 1996 that the Greek Ministry for National Education and Religious Matters laid the foundations of a system designed to meet the educational needs of social groups with a particular social, cultural or religious identity (Act 2413/1996). The Ministry adopted cross-cultural education - a new form of education in Greece - as part of this policy. The aim of cross-curriculum education is to set up and run primary and secondary classes that provide education to young people with a specific educational, social or cultural identity. In cross-cultural schools, the standard curriculum is adapted to meet the specific educational, social or cultural needs of the students attending them.  A total of 26 cross-cultural schools have been set up throughout Greece since 1996. Of the 26 schools, 13 are primary schools, while there are 9 junior high schools and 4 senior high schools. A school can only be described as cross-cultural when repatriated Greek and/or foreign students account for at least 45% of the total student body. The educators in these schools receive special training, and are selected on the basis of their knowledge on the subject of cross-cultural education and teaching Greek as a second or foreign language (www.ypepth.gr).

[2] The identity of the four schools is not revealed for reasons of confidentiality.

[3] Muslim minority is the only official recognized minority in Greece. The status of this minority is specified by articles 37-45 of the Lausanne Treaty, which was signed in 1922 and which designed the national borders of the Balkan States. The minority population members are officially recognized as based on religious differences. Since 1991, three ethnic groups have been officially recognized

The selection of the schools was not random as the main criterion was cultural diversity of school population; therefore data were derived with convenience sampling. The above-mentioned areas (Attica & Thrace) have high cultural diversity and common social and economic characteristics, such as low social and economic status with high unemployment records. Analytical proposal of the research was submitted to the research board of Greek Ministry of Education for the necessary approval. The approval was given with certain prerequisites: any video - recording or voice - recording of the sessions with the students was strictly forbidden, due to the protection of children's rights. Additionally, school directors, teachers and parents should give consent for students to take part at both research and intervention. All restrictions of approval were followed. Since the Ministry of Education had rejected any record of the procedure (visual or hearing), the cooperation with participant observers was the only possible way to register in details all the narratives of the group sessions. The participant observers were present in all meetings with students (sessions and focus group interviews). Two students attending the last year of their studies at Department of Social Administration and Political Science, of Democritus University of Thrace, as well as one graduate of the same Department, took the roles of participant observers in Thrace and Attica. According to Robson, (1993), observation is the technique of gathering information. Main objects of observation were the space location of the sessions and the actors  participating students. Verbal and non-verbal communication, body language, face gestures, dialogues, certain ways of interaction among participants were paid attention and  noted on diaries. Furthermore, observers noted detailed information about the objects and physical elements, time and sequence of events, feelings and emotions at particular settings. The observer's diaries consisted information concerning the goals of the groups, the expectations, the values, the rules and the procedure of following them, the interaction, the codes of communication, the relationships, the roles, the external influences, the decision making procedures, the levels of trust, the occurring changes and the revealing of the sources of energy within the group.

Finally, 221 students, attending the fourth, fifth and sixth grade took part at the research and completed two questionnaires in likert scale. First questionnaire (Questionnaire A), aimed at the exploration of their needs and the evaluation of their behavior concerning bullying, while the second one aimed at assessing the levels of self confidence and self  awareness and their relation to the appearance of violent incidents (Manual for the Self Perception Profile for Children, Harter, 1985). Both questionnaires were administered in class by the researcher, while students were instructed to complete them anonymously. The questionnaires were completed in the classroom within two didactic hours with the presence of the teacher of each separate class.   The researcher developed Questionnaire A, which aimed in assessing: 1) peer victimisation, 2) frequency of the incidents, 3) feelings provoked and 4) ways of response. Five questions provided further information about the prevalence of different forms of bullying behaviour. It was based on the definition of bullying, proposed by Olweus (1993; see above) and consisted 12 questions (5 of which were closed while the rest were open ended questions) about all aspects of bully/victim incidents: physical, verbal, indirect, racial, initiation of various forms of bullying on other students, place that bullying occurs, pro-bullying and pro-victim attitudes and the extent to which teachers, peers, and parents are informed. Questionnaire B is the Greek version of the Harter (1985) questionnaire SPPC: "Self-Perception Profile for Children". A manual questionnaire for the Self-Perception Profile for Children of 4th, 5th and 6th grade. Its purpose was to explore the possible correlation between levels of self-esteem with the involvement in bullying.  The Questionnaire B: "How I perceive Myself", consists 30 closed questions assessing the following six scales: 1) School Performance, 2) Peer Relationships, 3) Athletic Competence, 4) Physical Appearance, 5) Conduct-Behaviour, 6) Self-Esteem.

## *Methodology*

The first phase of the study consisted a thorough exploration of the characteristics of sample population, the nature of violence, its various ways of expression, the frequency and the consequences in student's mental health, the effects for the educational procedure, the school's policy towards violent incidents and the procedure followed for the monitoring and estimation of such incidents. After identifying the roles engaging in bullying, a thorough examination of the influence of independent variables - gender, class, country of birth, presence of parents, mean score of grades, educational level of the father, birth order in the family, school performance, peer relationships, physical appearance, athletic competence, conduct-behaviour, self-esteem to the dependent variable - involvement in bullying incidents from the roles of Bully - Victim – Bystander - Uninvolved was conducted. During the second phase, a three-month social work group intervention was designed and implemented on a weekly basis, in two of the four schools (school A & D), aiming at the prevention of the phenomenon of bullying through the cultivation and enhancement of social and personal skills.

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within the Muslim minority: those of Turkish origin, Pomaks (who speak a Bulgarian – Slavic dialect)], and Gypsies – Roma (Kandylaki, 2005: 30-31).

The fifth grade of both schools was selected according to the teachers' suggestions and the questionnaires' results. The theoretical framework of the intervention is based on the System's theory and focused on the interaction between the person and its environment. At the same time preventive interventions are eclectic as they combine theoretical approaches for the best accomplishments of goals, they address difficulties through the utilization of the recognized strengths and sources that are available in the individual's environment; family, group or community (Wilke 1996, Dupper, 2013, Saleebey 1997).

Four basic elements framed mainly the intervention: development of self-awareness, acknowledgment and expression of feelings control of emotions, development of interpersonal relationships within the group  opportunities for co operation and conflict resolution of violent behavior  examination of factors that affect the behavior consequence. Student's strengths, talents and abilities were the main focus of the intervention, as the enhancement of self-esteem and positive self-perception consist bullying preventive factors. With respect to their personalities and the positive aspects of their behavior (strengths based model), the intervention focused on strengthening the individuals in order to acknowledge their abilities, appreciate their achievements, focus on their skills and talents, improve their interpersonal relationships and eliminate the verbal and physical violence.

The last phase formed the evaluation process of the program one year after its completion. A before  after evaluation was conducted for the assessment of outcomes through structured questionnaires, focus group interviews with both students and teachers and the observer's detailed diaries. The implementation of focus group interviews with students aimed in exploring their views and attitudes concerning bullying, their feelings about certain incidents and how they manage them.

## Sample characteristics

During the first phase of the research, data were collected from 221 students out of 639; the total population of students in all four primary schools, a response rate of 34.6%. From that sample, 52% were boys and 48% girls. Most of the students were born in Western Countries; of which 80.4% were born in Greece and only 15% were born in the Balkan Countries, Asian and African Countries and the Former Soviet Union [Appendix: Tables 1 & 2]. Table 1 presents the characteristics of the sample population across schools. Homogeneity appears across the schools concerning gender ($X^2 = 4.709$; $df = 1$; $\rho$-value = 0.194) (Agresti, 2002), presence of parents (Fisher's Exact Test = 6.358; $\rho$-value = 0.285) (Agresti, 2007), birth order in the family (Fisher's Exact Test 12.438; $\rho$-value= 0.309), country of birth of the students (Fisher's Exact Test = 63.103; $\rho$-value = 0.237) and the mean score of grades ($F_{ANOVA} = 0.47$; $\rho$-value = 0.704) (Bewick, Cheek & Ball, 2004). Concerning the sample of students who participated in the intervention each group had its own characteristics and different ways of interacting. In Attica, cross-cultural primary school A, students of the 5th grade had a 'bad reputation' concerning their behavior. High diversity in country of birth was the main characteristic, since students were coming from Cameroon, Germany, United States of America, Philippines, Zambia and Albania [Table 2]. Further diversity was obvious not only in outside characteristics and mother tongue language but also in understanding the Greek language, age, gender and school performance. They had behavioral problems, difficult relationships between each other, severe rejection from co students; which was expressed both verbally and physically, lack of respect and empathy and lack of communication based on rules. They expressed anger for their parents, hardly negotiated the rules and found relief in violent games. The 5th grade of Thrace cross-cultural primary school D had its own characteristics: diversity concerning the country of birth and the religion, different levels of understanding the Greek language.  Difficulties in relationships, indirect expression of rejection; mainly in verbal and non verbal ways, lack of trust within the group and discrimination between bad and good students; concerning the academic performance. Students remained silent and showed reluctance to express feelings, thoughts and opinions; they were avoiding interaction or dialogue with each other. Also passive hostility was expressed from girls towards boys.

**Table 1. Characteristics of Sample (N=221)**

| Variable | | School A | School B | School C | School D | Total |
|---|---|---|---|---|---|---|
| **Gender** | Boys | 37 | 25 | 27 | 26 | 115(52.0%) |
| | Girls | 33 | 31 | 14 | 28 | 106(48.0%) |
| | Total | 70(31.7%) | 56(25.3%) | 41(18.6%) | 54(24.4%) | 221(100%) |
| **Presence of Parents** | Students living without their father | 6 | 4 | 4 | 3 | 17(7.9%) |
| | Students living without their mother | 0 | 2 | 0 | 1 | 3 (1.4%) |
| | Students living without their parents | 3 | 0 | 0 | 1 | 4(1.8%) |
| | Students living with both of their parents | 59 | 49 | 37 | 47 | 192(88.9%) |
| | Total [a] | 68(31.5%) | 55(25.5%) | 41(18.9%) | 52(24.1%) | 216(100%) |
| **Education level of the father** | Primary school | 2 | 3 | 2 | 2 | 9(4.2%) |
| | Junior high school | 7 | 9 | 2 | 7 | 25(11.6%) |
| | Senior high school | 7 | 12 | 8 | 12 | 39(18.1%) |
| | University of Applied sciences | 4 | 5 | 2 | 5 | 16(7.4%) |
| | University | 18 | 18 | 8 | 10 | 54(25.1%) |
| | Don't know | 29 | 8 | 19 | 16 | 72(33.5%) |
| | Total [b] | 67(31.2%) | 55(25.6%) | 41(19.1%) | 52(24.2%) | 215(100%) |
| **Birth order in the family** | 1st child | 30 | 25 | 25 | 29 | 109(52.9%) |
| | 2nd child | 20 | 16 | 14 | 14 | 64(31.1%) |
| | 3rd child | 8 | 11 | 2 | 5 | 26(12.6%) |
| | 4th child | 1 | 0 | 0 | 3 | 4(1.9%) |
| | 5th & 6th child | 2 | 1 | 0 | 0 | 3(1.5%) |
| | Total [c] | 61(29.6%) | 53(25.7%) | 41(19.9%) | 51(24.8%) | 206(100%) |
| **Mean Score of Grades** | 7 | 4 | 0 | 0 | 6 | 10(5.0%) |
| | 8 | 7 | 10 | 7 | 5 | 29(14.4%) |
| | 9 | 16 | 11 | 14 | 10 | 51(25.4%) |
| | 10 | 32 | 33 | 18 | 28 | 111(55.2%) |
| | Total [d] | 59(29.4%) | 54(26.9%) | 39(19.4%) | 49(24.4%) | 201(100%) |

a. 5 of the students didn't answer the question.

b. 6 of the students didn't answer the question.

c. 11 of the students didn't answer the question.

d. 20 of the students didn't answer the question

**Table 2.  Country of Birth of Intervention group (n=26)**

| Variable | School A | | School D | | |
|---|---|---|---|---|---|
| **Country of Birth** | Boys | Girls | Boys | Girls | Total |
| **Greece** | 4 | 2 | 7 | 5 | 18(69.2%) |
| **USA** | 1 | 0 | 0 | 0 | 1(3.8%) |
| **Germany** | 1 | 0 | 1 | 0 | 2(7.7%) |
| **Albania** | 1 | 0 | 0 | 0 | 1(3.8%) |
| **Philippines** | 1 | 0 | 0 | 0 | 1(3.8%) |
| **Cameroon** | 1 | 0 | 0 | 0 | 1(3.8%) |
| **Zambia** | 1 | 0 | 0 | 0 | 1(3.8%) |
| **Russia** | 0 | 0 | 0 | 1 | 1(3.8%) |
| **Total** | 10(38.5%) | 2(7.7%) | 8(30.8%) | 6(23.1%) | 26(100%) |

## *Outcome Measure*

Concerning Questionnaire A, students answered whether the past month were involved in bullying other students, if they had witnessed bullying incidents among schoolmates and if they were victims of bullying behaviour from other students. Five categories of answers were given for the first question: *certainly agree* to *certainly disagree* and for the second and third question the answers were: *never, rare, sometimes, often and very often*. They also referred to the type of bullying (physical, social or verbal) they experienced and how they felt or reacted afterwards.  By summarizing the answers of these questions involvement in bullying is categorized in: uninvolved, bully, victim and bystander, with reliability level of 0.727 (Reyanaldo & Santos, 1999).

### Independent variables

The following factors were examined thoroughly for a potential influence in bullying behaviour: 1) gender; 2) class; 3) country of birth; 4) presence of parents; 5) mean score of grades; 6) educational level of the father;
7) birth order in the family (1st, 2nd etc child); 8) school performance; 9) peer relationships; 10) physical appearance; 11) athletic competence; 12) conduct-behaviour; and 13) self-esteem. The first seven variables were driven from Questionnaire A. Gender-class-country of birth -presence of parents-educational level of the father-birth order in the family are factor variables, while mean score of grades is scale variable; which contain the average score of grades for the previous school year of students, ranging from 7 to 10 points. Answers of the last six scale variables were given according to the following four categories: *really false for me* or *sort of false for me* and *sort of true for me* or *really true for me*. These scale variables were driven from Questionnaire B; their short description and question examples are presented below:

- The scale of SCHOOL PERFORMANCE ranging from 0 to 5 points, contains five statements concerning their performance in school (e.g., *how well they believe they do at school, if they have any difficulties during homework and whether they need more time for studying*); Cronbach's Alpha rate (Reynaldo & Santos, 1999) of 0.718.
- PEER RELATIONSHIPS scale ranging from 0 to 5 points, contains five statements concerning their relationships with others (e.g., *their ability in making friends, their concern to be acceptable from others, their publicity among others students*); Cronbach's Alpha rate of 0.458.
- PHYSICAL APPEARANCE scale ranging from 0 to 5 points, contains five statements concerning their appearance (e.g., *what they believe about their physical appearance, if they are comfortable with their body, if they wish to change their appearance*); Cronbach's Alpha rate of 0.634.
- The scale of ATHLETIC COMPETENCE ranging from 0 to 5 points, contains five statements concerning their ability in sports (e.g., a*re they satisfied with their performance in sports, how well they do with outdoors sports*); Cronbach's Alpha rate of 0.556.
- The scale of CONDUCT-BEHAVIOUR ranging from 0 to 5 points, contains five statements concerning their behaviour (e.g., *what they believe about their behaviour, if they do the "right thing", if they have troubles from their behaviour*); Cronbach's Alpha rate of 0.628.
- The scale of SELF-ESTEEM ranging from 0 to 5 points, contains five statements concerning their self-esteem (e.g., a*re they satisfied with themselves and their lives, if they feel as capable as other students of their age*); Cronbach's Alpha rate of 0.674.

### Statistical analysis

Statistical analysis was applied on data, collected from student's questionnaires. At first, descriptive statistics provided information concerning the characteristics of sample population; age, gender, class, country of birth, family status (presence of parents and educational level of the father), mean score of grades of the previous year. The collected data were tested for normality; using Kolmogorov – Smirnov test and for homogeneity across schools; using $X^2$, Fisher's exact test and analysis of variance. Correlation rates were calculated; providing information concerning possible interactions among variables. An identification of roles engaging in bullying followed. A linear regression analysis; with dependent the scale: self-esteem, and a multinomial regression analysis; with dependent: the involvement in bullying incidents, were conducted to estimate their important predictors. In order to define the effectiveness of the intervention parametric t-test and non-parametric Wilcoxon signed rank test, for related samples, were conducted on scales of questionnaire B. Finally, a qualitative methodology was conducted for the data resulting from the open questions of questionnaire A and the focus group interviews. Concerning the qualitative research, a dynamic process of synthesis and comparison based on thematic analysis and grounded theory (Strauss & Corbin 1997, Krueger, 1987) was followed; which included multiple reading of notes (observer's detailed diaries), coding, classification and analysis of teacher's and student's speech. The analysis used the SPSS v.20 statistical package.

### Results

Students identify and admit that all types of bullying take place in their school, while they seem to adopt non static roles in bullying incidents: bully-victim, bully-bystander, victim-bystander and bully-victim-bystander. 22.2% of students are involved in the role bully-victim-bystander; findings also relevant to research (Kowalski et al., 2008, Botsari, 2010). Most of the boys and girls appear to involve in bullying from the role of bystander and from an alternating double role of victim-bystander and bully-victim-bystander [Table 3].

 Girls appear to excel in incidents of emotional violence through the role of bully; 23 (56.1%) versus 18 (43.9%) for boys. Students stated that they experienced feelings of anger and rage (70.5%), anxiety, fear and loneliness (51.5%), derived from the role of victim or bystander. They admitted seeking of revenge (29.4%), desire to fight back, or feel unable to prevent such incidents. Moreover, they reported tendency to conceal the facts from adults (teachers-parents) as they believe that they are not capable of preventing them; findings consistent with studies in Greece and abroad (Giannakopoulou et al., 2010, Psalti & Konstantinou, 2007, Olweus, 2007, Shaw, 2004).

They attribute bullying to the imbalance of power: "*They beat me because they are stronger*", to the origin and religion: "*I am a Muslim and Gypsy*", to the physical appearance or disability: "*I am ugly and they do not like me", "they make fun of me because I have a problem and it seems strange to them*".

High frequency of negative evaluation of the self was reported in questionnaire B; concerning their physical appearance (40%), self esteem (27.5%), conduct and behaviour (30.6%), school performance (35%) and peer relationship (37%). The assumption of normally distributed data is rejected for all scales, only when normality was tested using gender as a factor variable for scales it appeared that physical appearance is normally distributed for both boys (K-S: $\rho$-value = 0.123) and girls (K-S: $\rho$-value = 0.057) (Steinskog, et al., 2007). Table 4 presents the correlations between scale variables using non parametric correlation coefficient Spearman's rho (Mukaka, 2012). It appears that only the correlation between the mean score of grades and the physical appearance is insignificant, other correlations are significant but they show a medium correlation between variables, therefore their interaction is not included at the regression model.

**Table 3. Involvement in bullying behavior by gender**

| Roles engaging Bullying | Boys | Girls | Total |
|---|---|---|---|
| **Bully** | 1(0.5%) | 5(2.3%) | 6(2.7%) |
| **Victim** | 9(4.1%) | 12(5.4%) | 21(9.5%) |
| **Bystander** | **21(9.5%)** | **22(10%)** | **43(19.5%)** |
| **Bully & Victim** | 12(5.4%) | 6(2.7%) | 18(8.1%) |
| **Bully & Bystander** | 7(3.2%) | 12(5.4%) | 19(8.6%) |
| **Victim and Bystander** | **25(11.3%)** | **19(8.6%)** | **44(19.9%)** |
| **Bully & Victim & Bystander** | **31 (14%)** | **18 (8.1%)** | **49(22.2%)** |
| **Uninvolved** | 9 (4.1%) | 12 (5.4%) | 21(9.5%) |
| **Total** | 115(52.0%) | 106(48.0%) | 221(100%) |

**Table 4. Correlations between scales using non parametric Spearman's rho correlation coefficient (N=221)**

|  | Spearman's rho | 1 | 2 | 3 | 4 |
|---|---|---|---|---|---|
| 1. Mean score of Grades | Correlation coefficient |  | 0.361 | 0.299 | 0.092 |
|  | $\rho$-value |  | 0.000 | 0.000 | 0.201 |
| 2. School Performance | Correlation coefficient | **0.361** |  | 0.420 | 0.310 |
|  | $\rho$-value | **0.000[a]** |  | 0.000 | 0.000 |
| 3. Peer Relationships | Correlation coefficient | **0.299** | **0.420** |  | 0.441 |
|  | $\rho$-value | **0.000** | **0.000** |  | 0.000 |
| 4. Physical Appearance | Correlation coefficient | 0.092 | **0.310** | **0.441** |  |
|  | $\rho$-value | 0.201 | **0.000** | **0.000** |  |

a. Results significant at $\rho$-value <0.05 are bolded.

### *Regression analysis*

Table 5 presents the results of linear regression analysis (Lunt, 2013); which estimated the predictors of student's self-esteem; independent predictors were gender, country of birth and the mean score of grades. Results, reported that only gender and the mean score of grades were significant predictors of student's self-esteem. These two factors explain the 12.9% of student's self-esteem variability (Agresti, 2002). Table 6 illustrates the results of multinomial regression analysis (Asampana et al., 2017); which estimates the important predictors of the dependent variable: involvement in bullying incidents from the roles of Bully-Victim-Bystander-Uninvolved. The influence of independent variables such as gender, class, country of birth, mean score of grades, presence of parents, educational level of the father, birth order in the family (1st, 2nd etc child), school performance, peer relationships, physical appearance, athletic competency, conduct-behaviour and self-esteem, was examined. Results, reported that only mean score of grades distinguish involvement in bullying incidents. This significant predictor explains the 64.5% of student's bullying behavior variability (Agresti, 2002).

**Table 5. Estimation of linear regression with dependent variable Self-esteem, using stepwise method (Agresti, 2002)**

| Model independent variables | Unstandardized Coefficients | | Standardized Coefficients | t | *P* |
|---|---|---|---|---|---|
| | **B** | **SE** | | | |
| Total - N=221 | | | | | |
| Intercept | 1.250 | 0.485 | | 2.575 | **0.011** |
| Mean score of Grades | 0.242 | 0.053 | 0.317 | 4.587 | **0.000** |
| Gender | -0.332 | 0.095 | -0.242 | -3.508 | **0.001** |
| $R^2 = 0.129$ | | | | | |

**Table 6. Estimation of multinomial regression with involvement in bullying incidents as dependent variable (adjusted for boys in the sample) using stepwise method (Agresti, 2002)**

| Model dependent variable[a] | Model independent variables | Unstandardized Coefficients | | Wald | *df* | *P* |
|---|---|---|---|---|---|---|
| | | **B** | **SE** | | | |
| Total – N=221 | | | | | | |
| Bully | Intercept | -122.051 | 1537.941 | 0.006 | 1 | 0.937 |
| | Mean score of Grades | 13.360 | 1.069 | 156.048 | 1 | **0.000[b]** |
| | Gender [boys] | 43.445 | 2347.773 | 0.000 | 1 | 0.985 |
| Victim | Intercept | -116.163 | 8.575 | 183.519 | 1 | **0.000** |
| | Mean score of Grades | 14.464 | 1.013 | 203.711 | 1 | **0.000** |
| | Gender [boys] | 26.759 | 1773.938 | 0.000 | 1 | 0.988 |
| Bystander | Intercept | -124.721 | 1.651 | 5705.439 | 1 | **0.000** |
| | Mean score of Grades | 15.464 | 0.000 | . | 1 | . |
| | Gender [boys] | 26.120 | 1773.939 | 0.000 | 1 | 0.988 |
| $Pseudo\ R^2 = 0.645$ | | | | | | |

a. The reference category of dependent variable is: *Uninvolved*.
b. Results significant at *ρ*-value <0.05 are bolded.

### *Intervention*

### Objectives

Main objectives of the intervention were: a) improvement of interpersonal relationships, b) limitation of verbal and physical violence among students, c) search for opportunities, alternative - operating modes of communication, d) development of solidarity - mutual support among students and e) recognition of diversity as a positive element of diversity and creativity. The intervention attempted to show children alternative ways to cope better with every day difficulties.

### Implementation

The general title for the intervention was: "Communication Games". Practices and theory of group social work was its main technique. The design was based on the findings of the research. Theoretical basis was System's approach (Wilke, 1996) and the Strength's based model, (Saleebey, 1997, Dupper, 2003) using the method of group social work. Ten (10) weekly sessions, of ninety minutes (90) duration, took place within each school with the presence of the teacher and participant observers. Sessions focused on:

1. Setting ground rules
2. Cooperation (exploration of the advantages and disadvantages of group work and cooperation)
3. Conduct and communication (emphasis on positive and alternative ways of communication and interaction)
4. Self - Esteem (involvement in activities which reveal the strengths and talents of the individuals and contribute to positive self-perception)
5. Conflict resolution (exploration of alternative ways of resolving conflicts or disagreements)

6. Diversity (involvement in activities which reveal that differences are source of energy and positive interaction)
7. Emotions (acknowledgement of feelings and experiment with new ways of expressing difficult and positive emotions)
8. Self-care and responsibility (emphasis on self-care aspects and ways of taking responsibilities for actions)
9. Friendship (discussion about the criteria and values on which their friendships are based)
10. Managing pressure and influences (exploration of ways to make decisions apart from pressure or influences)

The initial design of the intervention was implemented in two of the four schools, in Attica and Thrace. A relevant proposal was addressed to all schools since according to the research findings bullying incidents were massively occurring. There was an effort aiming at sensitising each school community to take action and deal with the bullying problem. Two of the schools (one in Attica and one in Thrace) were hesitant; the directors were reluctant of taking responsibility for the implementation of the intervention.

They considered that the hours needed for the intervention would put additional burden to students. The need to "protect" the school community was stronger so they denied co-operating with the researcher. For the two other schools, there was actually an expression of request for the intervention to be implemented. The school director and most of the teachers acknowledged the existence of the phenomenon and considered that the implementation of the intervention would potentially help the students and the whole system of school community. According to the design of the research, the selection of the fifth grade (10 – 11 years old) would allow the opportunity to follow up the students of the intervention one year after its completion. Schools agreed to that and since there were two classes at the 5th Grade, they suggested the one considered to be the most "disgraced". It consisted for both cases group at risk, with characteristics as poor school performance, hostility, behavioural problems, and difficulties in relationships and co-operation in the classroom, combined with high ethnic diversity. In close co-operation with the teachers of the certain classes, and after they gave their absolute consent, the final selection was made. The intervention started after students' parents were informed about it and gave their written permission. Finally, the 5th grade from Attica cross-cultural School A consisted of 12 students (10 boys and 2 girls) and the 5th grade from Thrace cross-cultural School D consisted of 14 students (8 boys and 6 girls) were the two groups that attended the intervention. For the evaluation of the intervention the researcher took under consideration all parameters, stated in bullying literature, for the low efficacy of programs. According to Galanaki (2010), the effectiveness of most valuable programs against bullying appears to be minimal to moderate, according to the effect sizes mentioned in meta-analysis. In order to minimize the risks of evaluation certain steps, according to good practices (Ttofi, Farrington & Baldry, 2008), were followed: close supervision of all the research phases, constant commitment and positive attitude towards the accomplishment of goals, early identification of indirect forms of bullying and acknowledgement of student's developmental needs (concerning designing the intervention and the research tools). The evaluation of the intervention was conducted one year after in order not to be highly differentiated from the initial measurement.

## Comparing data before and after the intervention

According to the results of Questionnaire A, answered by 26 students; who attended the intervention, 12 reported no difference concerning their role in bullying incidents after the intervention. Reduction in 14 students, which involved in bullying incidents from the roles of bully, victim and bystander, was reported. Five (5) of them before the intervention reported involvement as bullies, while after the intervention they weren't involved in bullying from this certain role anymore. Six (6) students prior the intervention felt they were victims, while after no involvement as victims was reported from them. Finally three (3) students who were bystanders prior the intervention, after the intervention hadn't attend similar events. Table 7 presents a comparison between student's responses at scales (from questionnaire B), before and after participating the intervention. For the scales school performance, athletic competence and self-esteem no significant differences were reported. Furthermore, significant differences were revealed in three scales: peer relationships, physical appearance and conduct-behavior (Kim, 2015 & Kim, 2014). It appears that as the score in all three scales increases, students with bullying behavior exceed lower percents after the intervention rather than before [Appendix: Figures 1, 2 & 3]. Peer relationship is one of the strongest predictors of mental health of children and adolescents (Botsari, 2010); the above finding confirms the importance of this certain scale. As perceived physical appearance is linked to one's level of self-esteem, the certain scale is also of great significance, while conduct – behavior addresses the perception of positive manners.

**Table 7. Comparing the scales from Questionnaire B before and after the intervention**

| Scales | Mean[a] ±SD | Wilcoxon signed rank test (Z)[b] | t-test[c] | P-value |
|---|---|---|---|---|
| School Performance | 0.14 ± 0.94 | -0.550 | | 0.582 |
| Peer Relationships | 0.47 ± 0.45 | -4.223 | | **0.000[d]** |
| Athletic Competence | 0.007± 0.37 | -0.036 | | 0.971 |
| Physical Appearance | 1.47 ± 1.64 | | 4.561 | **0.000** |
| Conduct-Behavior | 0.64 ± 1.25 | -2.717 | | **0.007** |
| Self-Esteem | -0.14 ± 0.69 | -1.097 | | 0.273 |

a. The mean difference of scales before and after the intervention.
b. For related samples, Wilcoxon signed rank test with significance level ($\rho$) is given for non parametric variables.
c. For related samples, *t*-test statistic with significance level ($\rho$) is given with $df=25$ for parametric variables.
d. Results significant at $\rho$-value <0.05 are bolded.

A year after, students remember "Communication Games" according to the results of the focus groups interviews; that took place one year after the completion of the ervention. Students point out thoughts concerning their articipation: They make direct referral to the session about communication and cooperation: *"It helped me with my family and myself"* – *"In the family and classroom we all play together","I remember the co-operation and friendship".* Direct referral to the session on emotions and feelings: *"The emotions, I learned to express and to understand better how I feel"*. During the first session, a negotiation concerning the rules of the group: *"We did the contract, we set ground rules and that helped me a lot"*. They excessively mention the sessions concerning conflict resolution and the exploration of alternative ways of managing disagreement: *"It helped me to hang out with my friends and do not hit kids anymore"* –*"To say what we have in our mind to each other, in a good way"*- *"It helped me with my aggression. When I had disagreements with my friends, I knew what to do"*- *"When we said that we do not hurt or curse others, I stopped to do and helped me in friendship"* – *"It helped me a lot not to be afraid and not to quarrel "* –*"The boys do not hit one another very often and do not curse, and I find myself better with my friends when we fight".*

**Limitations**

The sample of this study was not representative for the entire country; which indicates its main limitation, therefore any generalization to the whole population should be avoided. Although this is a limited sample, according to the literature (Walker, 1985), qualitative research can contribute to policy formulation in developing a theory of social action grounded in the experience of the issue under study. Another restriction was the fact that the researcher was the same person who designed and implemented the intervention. The multiple roles: researcher, active observer, group facilitator, was extremely challenging; needed extended attention and demanded objectivity and constant self-observation.

*Discussion*

The adoption of non static roles in bullying incidents (according to the research findings): bully-victim, bully-bystander, victim-bystander and bully-victim-bystander indicate that interventions should address the phenomenon in holistic way, not only focusing on roles. Concerning the main research questions and the influence of the examined predictors to the involvement in bullying incidents, results reported that only mean score of grades distinguish involvement to the phenomenon. Although in this research gender predicts only student's self esteem, both boys and girls need to be equally treated in the context of an intervention. The intervention in schools, took under consideration the relationships dynamic of all groups of school community along with their particular characteristics and the identification of 'special circumstances' of the wider community. It had a positive impact on reducing the frequency of bullying incidence in the intervention groups classes and improving the relationship with their peers, their conduct – behavior and their self-esteem. This study, in schools with actual realistic circumstances and contemporary characteristics, aspires to affect and also contribute to an academic dialogue concerning the implementation of health promotion programs, aiming in showing the absolute necessity of the implementation of social work programs at schools. The innovation of the intervention was the absolute avoidance of focusing in the problem of bulling. The severity of incidents of violence among schoolchildren in Attica and the concealed forms of bullying in Thrace school has been a source of justification for the selection of the strengths based model. Avoidance of explicit references to the terms of bullying, aggression and intimidation was selected in order to prevent the resurgence of tension and resistance of students.

Through the intervention students had the opportunity to explore their relationships with other students and the broader environment – the rest of the school, society and family. They had the chance to discuss further issues that they brought to the group. This allowed them to get to know each other in a different way. They examined the ways they interacted and challenged violent behaviour, while they tried to develop alternative ways of dealing with their emotions. Significant benefits derived for all parts of the school community as the teachers were actively evolved in the planning and implementation of prevention policy at schools. Teachers expressed positive feedback towards the intervention and its influence to the school community. Furthermore, the relationship and co-operation between parents and teachers were viewed from a different perspective. Teachers who were present in the classroom during the sessions were actually trained in dealing such matters within the classroom with alternative ways; they even attempted to continue the work with children even after the end of the programme. Schoolteachers appreciated the presence of a social worker at school and they eventually showed much less resistance by identifying the positive effects of the co-operation. The director of School D, addressed request to the Ministry of Education pointing out the urgency and importance of appointing social workers at schools. Finally, both schools started procedures in order to decide the philosophy and values of a whole school policy for the management and prevention of bullying.

## Concluding notes

The school community contains remarkable sources of energy deriving from the richness of interaction among students, teachers, parents and the local community. The above mentioned conditions consisted of an extremely fertile ground for the implementation of social work interventions in schools. All the needs and difficulties faced by all groups of the school community were of crucial importance. At the same time, the whole situation consisted of a great challenge for a social worker. The implementation of a preventive intervention in schools of such a complex and dynamic system, required inclusion of diversity. Anti-bullying interventions need to focus on how bullying is managed within a school setting. The implementation of social work programs seems an absolute necessity in order for all school parts to cope with the contemporary complexity and a variety of challenges affecting every-day life at school. Finally, it's worth mentioning that a number of restrictions and challenges came along this fascinating and rich full experience of co-operation with schools in Attica and Thrace. According to each school's culture (regardless its location) was either close or open to the challenge of interaction with the professionals. Resistance appeared often disguised in time limitations, bureaucracy, matters of responsibility, difficulties in communication and intention to protect the students. It is certainly a great challenge for schools to overcome all the resistance but it seems that besides the existing difficulties benefits are substantial.

## Appendix

**Table 1: Country of Birth of Sample (N=221)**

| Variable | | School A | School B | School C | School D | Total |
|---|---|---|---|---|---|---|
| **Country of Birth** | Greece | 39 | 47 | 38 | 48 | 172(80.4%) |
| | USA | 1 | 0 | 0 | 0 | 1(0.5%) |
| | Germany | 1 | 2 | 2 | 2 | 7(3.3%) |
| | Russia | 0 | 1 | 0 | 0 | 1(0.5%) |
| | Georgia | 0 | 0 | 0 | 2 | 2(0.9%) |
| | Albania | 2 | 2 | 1 | 0 | 5(2.3%) |
| | Egypt | 1 | 0 | 0 | 0 | 1(0.5%) |
| | Philippines | 2 | 0 | 0 | 0 | 2(0.9%) |
| | Romania | 3 | 3 | 0 | 0 | 6(2.8%) |
| | Poland | 1 | 0 | 0 | 0 | 1(0.5%) |
| | Nigeria | 3 | 0 | 0 | 0 | 3(1.4%) |
| | Ethiopia | 1 | 0 | 0 | 0 | 1(0.5%) |
| | Bangladesh | 1 | 0 | 0 | 0 | 1(0.5%) |
| | Cameroon | 1 | 0 | 0 | 0 | 1(0.5%) |
| | Sudan | 1 | 0 | 0 | 0 | 1(0.5%) |
| | Zambia | 1 | 0 | 0 | 0 | 1(0.5%) |
| | United Kingdom | 1 | 0 | 0 | 0 | 1(0.5%) |
| | Canada | 1 | 0 | 0 | 0 | 1(0.5%) |
| | Pakistan | 1 | 0 | 0 | 0 | 1(0.5%) |
| | Afghanistan | 2 | 0 | 0 | 0 | 2(0.9%) |
| | Bulgaria | 1 | 0 | 0 | 0 | 1(0.5%) |
| | India | 1 | 0 | 0 | 0 | 1(0.5%) |
| | Iran | 1 | 0 | 0 | 0 | 1(0.5%) |
| | Total[a] | 66(30.8%) | 55(25.7%) | 41(19.2%) | 52(24.3%) | 214(100%) |
| | Fisher's Exact Test = 63.103, $p$-value = 0.237 | | | | | |

a. 6 of the students didn't answer their Country of Birth.

**Table 2: Continent of Birth of Sample (N=221)**

| Variable | | School A | School B | School C | School D | Total |
|---|---|---|---|---|---|---|
| **Continent of Birth** | Western Countries | 43 | 49 | 40 | 50 | 182(85.0%) |
| | Balkan States | 7 | 5 | 1 | 0 | 13(6.1%) |
| | Asian Countries | 8 | 0 | 0 | 0 | 8(3.7%) |
| | African Countries | 8 | 0 | 0 | 0 | 8(3.7%) |
| | Former Soviet Union | 0 | 1 | 0 | 2 | 3(1.4%) |
| | Total [a] | 66(30.8%) | 55(25.7%) | 41(19.2%) | 52(24.3%) | 214(100%) |
| | Fisher's Exact Test = 40.522, $\rho$-value = 0.000 | | | | | |

a. 6 of the students didn't answer their Continent of Birth.

**Figure 1. Comparing Peer Relationships of bullies before and after the intervention**
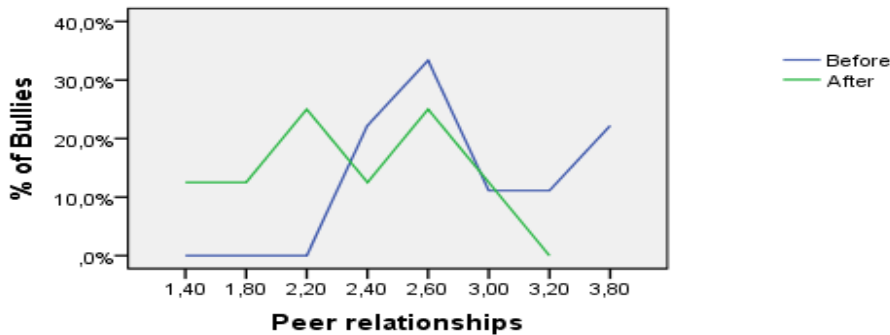


**Figure 2. Comparing Physical Appearance of bullies before and after the intervention**
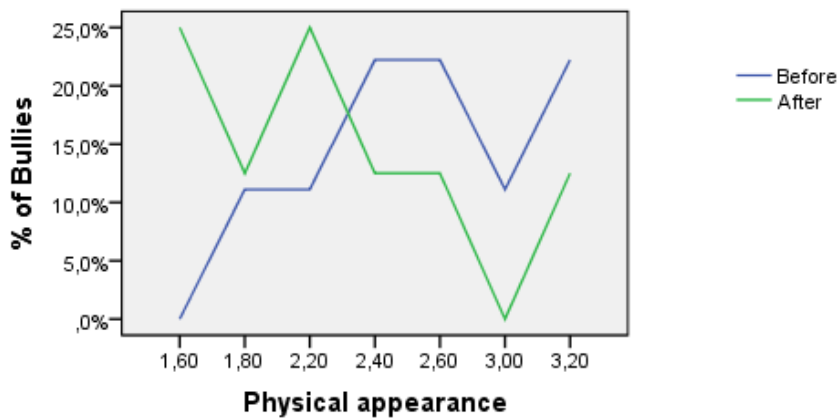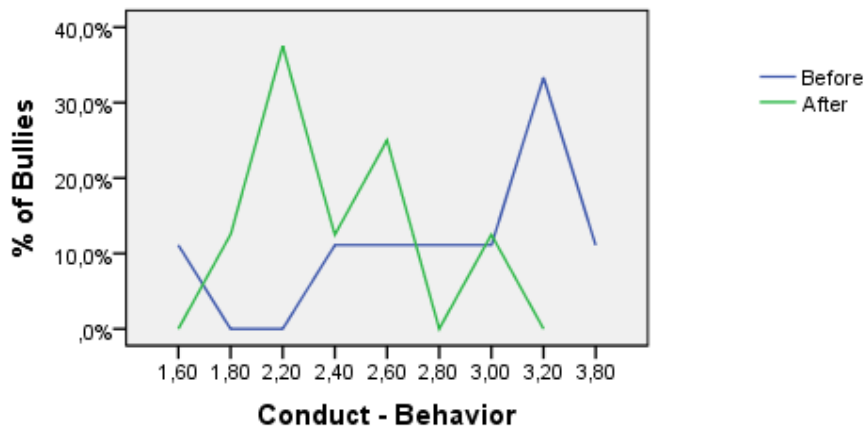


**Figure 3. Comparing Conduct - Behavior of bullies before and after the intervention**

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