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Impact of a psychoeducation program on reducing anger behavior of primary school students at New Assiut city

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Abstract
The increasing prevalence of childhood antisocial behavior is a serious social problem presenting major costs and challenges for individuals, families, schools, and communities.This study **aimed to** study the effect of a psychoeducation program on reducing anger behavior of primary school students with anti-social behaviors.A total number of 50 primary studentsof AGS language at New Assiut city were included in the study .**Tools:** Demographic data sheet, socio-economic assessment scale, and Personal experiences associated with anger feeling scale were used for gathering the required data. **Results:** There were highly statistical significance differences between pre and posttest of anger scale and its domain (p= 0.0001) with greet improvement in the behaviors of the studied children after the intervention. Also, Correlation was found between mean and 'r' values of anger behavior total scores and its domains throughout the intervention program. Statistically, a significant difference was found between the standard deviation and 'r' values of pre-test and post-test anger total score (p <0.0001).**Conclusion**: There was a great improvement in children's behaviors after program application. Male students show signs of anger behavior than female students. **Recommendations**: Counselors need to be employed in schools. Professionally training of teachers is required to deal with the anger behavior of the children. Proper application of reward and punishment by both the teachers and parents can help.
Keywords: psychoeducation program, primary school, students, anti-social behaviors

Introduction:

The increasing prevalence of childhood antisocial behavior is a serious social problem presenting major costs and challenges for individuals, families, schools, and communities worldwide. According to **Farrington (2005)**, antisocial behavior is distinguished by interpersonal relationships, seeks group respect and validation, is dishonest and deceptive, lacks empathy, and is socially disrespectful, impulsive, reckless and disobedient. It thus includes "a wide variety of behaviors which reflect a violation of societal norms and/or aggression against others" (**Kazdin and Buela-Casal, 1996)**.

A body of research shows that children with early-onset antisocial behavior are at risk of suspension and exclusion from school and are much more likely than other children to follow a path leading to adverse social, health, and economic consequences including criminal behavior and violence, educational failure, chronic illness, and unemployment in adulthood **(Parsonage, Khan& Saunders, 2014)**.

Antisocial behavior in which the person violates social rules regularly and commits aggressive acts that annoy others. An oppositional defiant syndrome is mostly seen in younger children as a milder type. This policy uses the term ' conduct disorders ' (or' conduct disorder') to describe all disorders.Because the word is not well known to the public or even to health professionals, the name of the guideline incorporates the phrase ' antisocial behavior ' to make it clear to as many people as possible what the guideline discusses. **(American Psychiatric Association, 2000).**

In modern psychology and pedagogy, the problem of aggressiveness in children in primary school is one of the most critical. Humanity's entire history convincingly shows that violence is an integral part of the person and society's existence. Besides, aggression has an attractive and contagious powers-the majority of people denies aggression, but often demonstrate it in their way.Aggression is often a hallmark of antisocial behavior and is commonly displayed in schools **(Walker, Ramsey, & Gresham, 2004).** It refers to a range of behaviors that can result in harm to oneself, others or objects in the environment. Aggression manifests in many forms including physical aggression (e.g., punching, destroying property), verbal aggression (e.g., name-calling, threatening) and relational aggression (e.g., ignoring, spreading rumors) **(Coyne, Nelson, & Underwood, 2011).**

Translated from the Latin, "aggression" means "attack". The subject has recently become increasingly urgent due to an increase in juvenile delinquency, multiple forms of aggressiveness, violence in the subculture and community of children. Anger and aggression was defined as "Any form of behavior aimed at harming or injuring another living being motivated to avoid treatment of this kind" **(Baron, 1994).**

Aggression can be direct, such as physical violence,abusive orthreateningbehavior,orindirect,suchasspreading rumors or deliberate social exclusion. If children can cognitively handle negative feelings, such as frustration, they can choose more constructive behavior and resist violent or destructive behavior **(Feindler et al 1984; Lochman and Wells, 2003).** While it is difficult to find direct measures of the prevalence of anger and aggression problems in children and young people, indirect measures indicate that anger and aggression are significant social problems. Prevalence estimates of externalizing behavior problems, which include aggression but also hyperactivity and delinquency, are estimated to be between 13% and 14% of the population under 18 years of age in Australia **(Sawyer et al,2000).**

Some interventions target anger by modifying the environment or other people's behavior. Such interventions will not be the focus of this review; there are already some Cochrane systematic reviews that focus on the family as means of addressing children's behavior**(Furlong 2012; Littell et al; 2005; Turner et al, 2007; Woolfenden, 2001).** Anger management interventions typically use a cognitive-behavioral approach although other approaches, such as mind-body interventions, have also been investigated. Cognitive-behavioral therapies target behavior and patterns of thinking to address a person's difficulties. Examples include anger control training, the Coping Power Program and social skills training.

Anger control training **(Feindler, 1984)** is based on Novaco's anger control intervention for adults **(Novaco, 1975)** and Meichenbaum's stress inoculation model **(Meichenbaum, 1973).**This contains three courses that concentrate on stress control (through relaxation techniques), addressing social problems (by manipulating anger's psycho-cognitive mediators), and learning in social skills (modeling and implementing adaptive social behavior).

Significance of the study:
Antisocial behavior not only is an alarming phenomenon in children but a very serious social, psychological and pedagogical problem. Anger and aggressive children are pugnacious, quick to excite, irritable, touchy, uncompromising, persistent and aggressive to others. Their relations with family, peers, and teachers are always tense and ambivalent.

Anger in children tends to peak in early childhood between two and four years of age (Piquero 2012; Tremblay 2010), with the majority of children learning socially acceptable ways to deal with their environment as they grow up. However, some children (estimatedat15%, Piquero, 2012) fail to reduce their anger and aggressive behavior and exhibit a stable trajectory of aggression and anti-social behavior into adolescence and beyond. Problems with managing anger and aggression can impact negatively on children in a variety of ways, including school exclusions, social problems, externalising behavior problems, internalising behavior problems, poor emotional health and well-being ,and involvement in the criminal justice system. Early persistent aggressive behavior is linked to adult criminality (Piquero2012).

In science studies, press, scientific publications, etc., the aggressiveness of primary school children and children of different age groups was widely discussed and discussed. Sociologists, teachers, counselors, parents note that there is currently a substantial increase in the number of children susceptible to violence, which is a risk factor for their unlawful conduct in schools**(Parfilova, 2016).**

In most of our primary schools, there is not enough interest to discover students with anti-social behaviors and work out programs for how to deal with this category. So our study designed to study the effect of a psychoeducation program on improving the social behavior of primary school students with anti-social behaviors.

Methodology:
Aim: Our study aimed to study the effect of a psychoeducation program on improving the social behavior of primary school students with anti-social behaviors.
Hypothesis: Social behavior of primary school students with anti-social behaviors will be improving post psychoeducation program.
Research design: A Quasi-experimental (pre-post) research design was used in the study.

Study sample: The study was carried out at the AGS for language on New Assiut city, in which 50 primary students with antisocial behaviors and accepted with their parents to be participating in psychoeducation programs were included in the study.

Tools of data collection: Each student individuals was evaluated through two tools:

Tool 1: includes two parts: demographic data and Socio-Economic Assessment scale**:**

Part I*: *Demographic data Included name, age, sex, level of education …etc

Part II*: *Socio-Economic Assessment scale (Abd-El-Tawab, 2004):

This scale is an Arabic version designed by **Abd-El-Tawab (2004)** to assess the socioeconomic status of the family and consists of 4 dimensions, which include the following; Parent's level of education it included 8 items. Parent's occupation it included 2 items. Total family monthly incomes it included 6 items. The lifestyle of the family included 3 items.

Tool 2: Personal experiences associated with anger feeling scale (**Abd Elsalam A& Abd El Moati, H ,2001)**

This scale is designed to assess anger severity among students; it contained 36 items, which measure five dimensions of anger. The first dimension is the sharpness of anger: and its numbers 1.2.4.5. The second dimension: Anger: and its numbers 6.7.8.9.10.11.12.The third dimension: emotional feelings accompanying anger: its numbers are 3.29.30.31.33.34.35.36.The fourth dimension: Behavior and behavior patterns associated with anger: and its numbers 13.14.15.16.17.18.19.20.21.32.Fifth dimension: Mental judgments for assessing sources of anger and items numbers 22.23.25.25.26.27.28.

Scoring system of the anger scale:
Very often it takes 4 degrees, often it takes 3 degrees, sometimes it takes two degrees, and rarely takes one degree, and I do not feel and take zero.

Psychoeducation program:
This program was developed by the researchers and includes the following:

- **Teach empathy** through different situation by ask the child two situation, asking students how another child might feel when having bad comment things happen, what do you want to tell him in this situation and asking students how another child might feel when having angry with others, what do you want to tell him in this situation**.**
- **Explain personal space included:** tell the child that it is necessary for everyone to feel comfortable with some personal space and practice appropriate ways of interacting with someone during playtime. Practice social openings: show the child the best way to start a conversation, get the attention of someone, or join a group of children who are already playing together
- **.Reinforcing Social Skills as part three included** Activities and games that can provide additional assistance in the development of specific skills, and by playing The Name Game and Following the Leader; you can improve the social development and communication of your son. Researchers Sandra Sandy and Kathleen Cochran created The Name Game to help kids learn how important it is to get someone's attention before they talk. Have kids sit in a round and send. Ask him in the circle to name another child, and roll that child with the ball. Then the receiver takes his turn, naming another child and rolling the ball, etc. The classic game Follow the Leader teaches children to turn around and to practice patience.
- **Nonverbal skills:** Help kids recognize facial expressions and body language by watching child-friendly sound-off TV shows and watching what characters do and what certain movements might mean. "Predict what you think they're doing and start watching facial gestures," you can also watch magazines and collages of different facial expressions and learn about what people are talking about.
- **For tone:**

"Use a tape recorder to record different emotions in your voice and ask your child what they are, then explain how context varies with voice change, for example, try to capture phrases like" I'm mad !"In a strong, empathetic tone, and a soft, low, discarded voice," I feel so sad.

- **For attention span:**

Choose a subject and say three sentences— two related to the topic and one random if your child has trouble staying on the spot. Then ask your child to choose the off-topic phrase. Bring up the family pet, for example. Speak about how long he has been playing outside today and what he has been doing in the dog park, and then say something about the weather. Tell your child to differentiate between the different sentences

- Allows children to look at pictures of other children modeling suitable behavior in certain situations (hairdresser, doctor, playground), "Responding Social Skills" teaches children how to respond to others and how to understand the feelings of others.

Tools validity and Reliability:

Validity: Content validity of the questionnaire sheet was determined through an extensive review of literature about the social behavior of primary school students. Modification to the tools was made according to the panels' judgment on the clarity of sentences, appropriateness of the content, sequence of items, and accuracy of scoring and recording of items.

Reliability: Reliability analysis was used to determine the extent to which the items in the questionnaire are related to each other. Results of the pilot study were also used to confirm reliability (test-retest reliability). Cronbach's co-efficiency alpha for the questionnaire was 97. Pearson correlation co-efficiency indicated high internal consistency, which was 78, 68 for all items of the scales. The findings from validity and reliability suggested that the current scales could be used as a viable tool for data collection in this study.

Methods:

- Official permission was obtained from the Dean of the faculty of nursing-Assiut University directed to directors of AGS for language school at New Assiut city to accept to start of the research at AGS for language school.

- **Ethical consideration:** Oral consent was obtained from all students, teachers, and parents before collecting data. Explain to each chilled, teacher and parent aim of the study. No harmful maneuver and no hazards were anticipated. Confidentiality was maintained during all steps of the study.

- **Pilot study:** a pilot study was conducted on 10 primary school children, who were participated to tested the tool content of clarity and the time needed for filling the tool. Were included in the total sample.

- Assess the social behavior of students assigned the antisocial behavior students to be included in the study. Psychoeducation program for primary school students beginning by one session every other day (three times per week) and lasts for four weeks.

- Each session lasted for 15-30 minutes and consists of the following; beginningwith a few minutes of relaxed breathing, performed in sitting positions, patients were instructed to take diaphragmatic breathing.

- Methods of teaching have been used in each session includes demonstration and role-play. Media that have been used in each session includes demonstration, video, and Pictures.

Evaluation of psychoeducation program for primary school children used two times one before the program by using demographics tools, socio-economic assessment scale (Abd-El-Tawab, 2004), Personal experiences associated with anger feeling scale developed by (**Abd Elsalam A& Abd El Moati, H ,2001)** and assess the social skills.

Statistical method:

After completing the fieldwork, data were processed, extensively reviewed. Each answer sheet was coded and scored, So that data could be prepared for computer use. Data were statistically analyzed using SPSS Version 16.0 statistical software packages. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and cross-tabulation variables. Test of significance was used and the level of significance is $P < 0.05$, is used if the P-value is less than 0.01, it was highly significant if the P-value is < 0.001. Limitations of the study:

Results

Table (1): Distribution of Personal data of the students:

Personal data	No. (50)	%
Age: (years)		
≤ 12	16	32.0
> 12	34	68.0
Mean ± SD (Range)	13.40 ± 1.84 (10.0 – 16.0)	
Sex:		
Male	24	48.0
Female	26	52.0
Residence:		
Rural	32	64.0
Urban	18	36.0
No. of siblings:		
None	3	6.0
1 – 3	37	74.0
4 – 6	10	20.0
Family history:		
Negative	42	84.0
Positive	8	16.0
Personality:		
Withdrawn	11	22.0
Socialized	39	78.0
Relation with colleges:		
Good	41	82.0
Not good	9	18.0
Relation with teachers:		
Good	43	86.0
Not good	7	14.0
Relation with workers:		
Good	42	84.0
Not good	8	16.0
Birth order:		
First	19	38.0
Middle	19	38.0
Last	12	24.0
Social class:		
Low	18	36.0
Middle	17	34.0
High	15	30.0

Personal characteristics of the studied children presented in **table (1).** It was noticed that, more than two-thirds of the children more than 12 years (68%) with a mean age of 13.40 ± 1.84 years old. With more than half of the studied children were girls. Nearly two-thirds of the studied children came from the rural area and has from 1-3 siblings (64% and 74% respectively). Besides, the majority of them have a negative family history of anger behaviors with socialized personality; also have good relationships with teachers, workers, and colleges (84%, 78%, 86%, 84%, and 82% respectively). Finally, nearly more than one-third of them were first, middle child, and came from low social class (38%, 38%, and 36% respectively)

Table (2): Distribution of Anger score and its domains in pre-test and post-test:

Anger scale	Pre-test (n= 50)	Post-test (n= 50)	P-value
Anger severity	9.88 ± 3.11	2.86 ± 2.60	0.000*
Anger stimulation	11.78 ± 6.10	3.58 ± 3.21	0.000*
Anger associated feelings	7.30 ± 4.53	3.45 ± 2.86	0.000*
Anger associated behaviors	8.96 ± 5.28	6.10 ± 4.71	0.005*
Reaction related to anger	5.78 ± 4.91	4.39 ± 3.00	0.004*
Anger total score	43.70 ± 16.91	18.40 ± 14.00	0.000*

Table (2). It points to highly statistically significant differences between the pre and posttest in the areas of anger scale and its domain throughout intervention program phases (p= 0.000) with greet improvement in the behaviors of the studied children after the intervention.

Table (3): Correlation among anger total score and its domains throughout intervention program phases (pre and post-intervention)

			Anger severity	Anger stimulation	Anger associated feelings	Anger associated behaviors	Reaction related to anger	Anger total score
Pre-test	**Anger severity**	r-value						
		P-value						
	Anger stimulation	r-value	**0.343**					
		P-value	**0.015***					
	Anger associated feelings	r-value	**0.317**	0.201				
		P-value	**0.025***	0.162				
	Anger associated behaviors	r-value	0.148	0.124	**0.380**			
		P-value	0.305	0.391	**0.007***			
	Reaction related anger	r-value	0.197	0.195	**0.561**	**0.694**		
		P-value	0.171	0.174	**0.000***	**0.000***		
	Anger total score	r-value	**0.516**	**0.581**	**0.690**	**0.709**	**0.795**	
		P-value	**0.000***	**0.000***	**0.000***	**0.000***	**0.000***	
Post-test	**Anger severity**	r-value						
		P-value						
	Anger stimulation	r-value	**0.613**					
		P-value	**0.000***					
	Anger associated feelings	r-value	**0.505**	**0.365**				
		P-value	**0.000***	**0.009***				
	Anger associated behaviors	r-value	0.231	**0.352**	**0.470**			
		P-value	0.107	**0.012***	**0.001***			
	Reaction related anger	r-value	**0.532**	**0.679**	**0.665**	**0.669**		
		P-value	**0.000***	**0.000***	**0.000***	**0.000***		
	Anger total score	r-value	**0.691**	**0.783**	**0.762**	**0.698**	**0.905**	
		P-value	**0.000***	**0.000***	**0.000***	**0.000***	**0.000***	

Table (3): Shows Correlation between mean and 'r' values of anger behavior total scores and its domains throughout the intervention program. Statistically, a significant difference was found between the standard deviation and 'r' values of pre-test and post-test anger total score (p <0.000).

Table (4): Anger total score according to personal data

Personal data	Anger total score Mean ± SD	P-value
Age: (years)		
≤ 12	32.06 ± 17.53	0.857
> 12	30.57 ± 21.17	
Sex:		
Male	35.58 ± 22.21	0.028*
Female	26.87 ± 16.88	
Residence:		
Rural	30.02 ± 18.47	0.385
Urban	32.89 ± 22.63	
No. of siblings:		
None	27.67 ± 24.72	0.203
1 – 3	29.92 ± 18.31	
4 – 6	36.25 ± 24.46	
Family history:		
Negative	31.19 ± 20.33	0.900
Positive	30.31 ± 18.81	
Personality:		
Withdrawn	32.68 ± 21.62	0.878
Socialized	30.59 ± 19.65	
Relation with colleges:		
Good	31.20 ± 19.92	0.632
Not good	30.39 ± 20.97	
Relation with teachers:		
Good	30.85 ± 19.67	0.960
Not good	32.29 ± 22.72	
Relation with workers:		
Good	30.98 ± 19.49	0.868
Not good	31.44 ± 23.20	
Birth order:		
First	28.97 ± 21.54	0.513
Middle	34.82 ± 20.06	
Last	28.38 ± 17.03	
Social class:		
Low	30.06 ± 23.62	0.971
Middle	31.71 ± 19.00	
High	31.50 ± 16.73	

When examining the relationship between anger scores and their personal characteristics **table (4)** revealed that there were significant relations between the total anger scores of the studied children and one item of their characteristics (sex). It was noticed that percentages of anger scores were higher among males (p=0.028).

Discussion:

Antisocial behavior in children is not just an alarming phenomenon, but a very serious social, psychological and pedagogical problem. The increasing prevalence of childhood antisocial behavior is a serious social problem presenting major costs and challenges for individuals, families, schools, and communities.

The present study displayed that there were highly statistically significant differences between the pre and posttest in the areas of anger scale and its domain throughout intervention program phases with greet improvement in the behaviors of the studied children after the intervention. This is maybe due to the preventive interventions that can interrupt the early onset trajectory before behavior patterns become too deeply ingrained.The same results were found in a study carried out by **(Abdulmalik et al,2016)** which revealed that there is the high level of aggressiveness of younger students decreased from 15% to 0%, after the program of

intervention**(Abdulmalik et al,2016)**Also, in the same line both of **(Petermann & Natzke, 2008) and (Weisz & Kazdin, 2010).**

Concerning the correlation between mean and 'r' values of anger behavior total scores and its domains throughout the intervention program. The current study showed that there is a highly statistically significant correlation between the standard deviation and 'r' values of pre-test and post-test anger total score. This may be due to school-based programs can target elements in the social ecology that exacerbate antisocial behavior (e.g., peer relations, student-teacher interactions, academic demands, and disciplinary approaches) and they provide improved potential for the coordination of interventions around the "whole child" This goes in the same line with the study done by **Wilson andLipsey (2007)** which stated that interventions show a decrease in aggressive and disruptive behavior.

The results of the current study revealed that the relationship between anger scores and personal characteristics of the students were significant relations between the total anger scores of the studied children and the male students. This is maybe due to that the male gender was more aggressive than females in expressing their feeling. This finding agreed with the finding of the study conducted by **(Collinshaw, etal., 2004)** which declared that Boys have higher prevalence rates than girls in expressing aggressive behavior. In the same line **(Undheim 2010).**

Limitations of the study:

- The conducting of this review is not without its limitations.
- The criteria did restrict the search to certain parameters concerning childhood antisocial behavior and therefore, did not consider all lifespan or etiological issues of the antisocial population, as it was restricted to school-age children and young people with etiological factors focused on peer and social factors.
- Also, this review adopted a broad and general view of the construct of antisocial behavior in the school context, which precluded any detailed exploration of some of the important specificities of the area. For example, some young people engage in acts of extreme antisocially, such as school shootings or violent extremism. Such instances of antisocial behavior in young people warrant a separate chapter.
- Finally, given the vast literature on antisocial behavior in young people, this review is by no means comprehensive.

Conclusion

Based on the results of the present study, it can be concluded that there was a great improvement in behavior after an intervention program with highly statistically differences. Male students show signs of anger behavior than female students.

Recommendations

Based on the previous finding of the present study, recommended that:

- Counselors are to be employed in our primary schools, to counsel the child who shows some signs of aggression.
- Professionally trained teachers are to be employed in our primary schools so that the aggressive behavior of the children can be properly managed and controlled.
- Proper application of reward and punishment by both the teachers and parents can help in tackling aggressive behavior in primary school children.
- Well, a conducive school atmosphere should be provided to make children comfortable, thereby reducing the occurrence of aggressive behavior in them.
- Sporting activities should be emphasized in our primary schools to reduce the level of aggression in primary school children.

- The curriculum of primary school should always reflect the needs of the children and should be child and activity-centered.
- Parents and teachers should work hand-in-hand in dealing with the aggressive behavior of primary school children.

References:

1. Abdulmalik, J., Ani, C., Ajuwon, A.J. et al. ((2016)): Child Adolescence Psychiatry Mental Health,10: 31. https://doi.org/10.1186/s13034-016-0116-5

2. Abd Elsalam A& Abd El Moati, H (2001) Personal experiences assosciatied with anger feeling scale faculty of arts, department of psychology , Banha University

3. Abed El-Tawab (2004): Socioeconomic status scale, Faculty of education, department of psychology, Assiut University.

4. American Psychiatric Association. (2000): Diagnostic and Statistical Manual of Mental Disorders: Text Revision (DSM-IV-TR). Washington, DC: American Psychiatric Association.

5. Baron RA (1994): HumanAggression. 2ndEdition. New York: Plenum Press.

6. Collishaw, S., Maughan, B., Goodman, R., & Pickles, A. (2004). Time trends in adolescent mental health. Journal of Child Psychiatry and Psychology, 45, 1350- 1362.

7. Coyne, S. M., Nelson, D. A., & Underwood, M. (2011). Aggression in Children. In P. K. Smith & C. H. Hart (Eds.), The Wiley-Blackwell Handbook of Childhood Social Development (2nd ed.) (pp. 491-509.

8. Farrington D. P. (2005). The importance of child and adolescent psychopathy.*J. Abnorm. Child Psychol.*33 489–497. 10.1007/s10802-005-5729-8 [PubMed] [CrossRef] [Google Scholar.

9. Feindler EL, Marriot SA, Iwata M. (1984): Group anger control training for junior high school delinquents. Cognitive Therapy and Research;8: 299–311.

10. Furlong M, McGilloway S, Bywater T, Hutchings J, Smith SM, Donnelly M. (2012): Behavioral and cognitive-behavioral group-based parenting programs for early-onset conduct problems in children aged 3 to 12 years. Cochrane Database of Systematic Reviews, Issue 2. [DOI: 10.1002/ 14651858.CD008225.pub2]

11. Kazdin A., Buela-Casal G. (1996). Conducta Antisocial: Evaluación, Tratamiento y Prevención en la Infancia y Adolescencia [Antisocial Behavior: Evaluation, Treatment, and Prevention in Childhood and Adolescence]. *Madrid: Pirámide.*

12. Littell J, Campbell M, and Green S, Toews B. (2005): Multisystem therapy for social, emotional, and behavioral problems in youth aged 10-17. Cochrane Database of Systematic Reviews, Issue4. [DOI:10.1002/14651858.CD004797.pub4]

13. Lochman JE, Wells KC. (2003): Effectiveness of the Coping Power Program and classroom intervention with aggressive children: Outcomes at a 1-year follow-up. Behavior Therapy;34(4):493–515.

14. Meichenbaum D, Cameron R. (1973): Stress inoculation: a skills training approach to anxiety management. Unpublished manuscript, University of Waterloo.

15. Novaco RW. (1975): Anger Control: the Development and Evaluation of an Experimental Treatment. Lexington, MA: Rowan & Littlefield,

16. ParfilovaGG (2016.): Managing and Preventing Aggressiveness in Primary School Children,IEJME — MATHEMATICS EDUCATION, VOL. 11, NO. 4, 921-931.

17. Parsonage, M., Khan, L., & Saunders, A. (2014). Building a better future: The lifetime costs of childhood behavioral problems and the benefits of early intervention. London: Centre for Mental Health. Retrieved from http://www.centreformentalhealth.org.uk/pdfs/building_a_better_future.pdf.

18. Petermann, F., & Natzke, H. (2008). Preliminary results of a comprehensive approach to preventing antisocial behavior in preschool and primary schools in Luxembourg. School Psychology International, 29(5), 606-626.

19. *Piquero 2012 Piquero AR, Carriaga ML, Diamond B, Kazemian L, Farrington DP. Stability in aggression revisited. Aggression and Violent Behavior 2012;17 (4):365–72.*

20. Sawyer MG, Kosky RJ, Graetz BW, Arney F, Zubrick SR, Baghurst P.(2000): The National Survey of Mental Health and Wellbeing: the child and adolescent component. Australian and New Zealand Journal of Psychiatry; 34 (2):214–20.

21. *Tremblay 2010 Tremblay RE. Developmental origins of disruptive behaviour problems: the 'original sin' hypothesis, epigenetics and their consequences for prevention. Journal of Child Psychology and Psychiatry 2010;51(4):341–67.*

22. Turner W, Macdonald G, Dennis JA. (2007): Behavioural and cognitive-behavioral training interventions for assisting foster carers in the management of difficult behavior. Cochrane Database of Systematic Reviews, Issue 1. [DOI: 10.1002/14651858.CD003760.pub3]

23. Undheim AM, (2010). Prevalence of bullying and aggressive behavior and their relationship to mental health problems among 12- to 15-year-old Norwegian adolescents. European Child & Adolescent Psychiatry;19(11): 803–11.

24. Walker, H. M., Ramsey, E., & Gresham, F. M. (2004). Antisocial Behavior in School: Evidence-Based Practices. Belmont: Wadsworth.

25. Weisz, J. R., & Kazdin, A. E. (Eds.). (2010). Evidence-based psychotherapies for children and adolescents (2nd ed). New York: Guilford Press.

26. Wilson, S., & Lipsey, M. (2007). School-based interventions for aggressive and disruptive behavior update of a meta-analysis. American Journal of Preventive Medicine, 33(2), S130-S143.

27. Woolfenden S, Williams KJ, Peat J.(2001): Family and parenting interventions in children and adolescents with conduct disorder and delinquency aged 10-17. Cochrane Database of Systematic Reviews, Issue 2. [DOI: 10.1002/ 14651858.CD003015]).