Application of Anti-bullying Education Package among Preparatory Schools Students at El-Mokatam District, Egypt.

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Abstract: Egyptian school children are no exception to their peers worldwide in facing bullying and victimization that has serious short- and long-term effects on children's physical and mental health. Therefore, **theaim** of this study was assess the effect of the developed anti-bullying educational package among preparatory schools students. **The research hypothesis:** was expected to improve student's knowledge and anti-bullying strategies hence to reduce reported incidents of peer bullying victimization. **Research design:** Quasi-experimental. **Subject and Setting:** A stratified simple random sample consisted of **465** students recruited from three preparatory schools affiliated to El-Mokatam District.**Data were collected** using three tools: (1) Structured Interviewing Questionnaire regarding demographic characteristics and students' knowledge and behaviour related to bullying. (2) Bully Attitude Scale for measurement of school students' attitudes toward bullying. (3) Multidimensional Peer Victimization Scale used to reflect prevalence in types of bullying. **The results:** A statistical significant differences was found between mean scores in students' knowledge, anti-bullying strategies and bully attitude before and after the intervention **(P= 0.000)**. As well as, the mean score of peer victimization of bullying was significantly reduced in both sex after the intervention **(p= 0.001)** for male and **(p= 0.000)** for female students. **Conclusion:** the developed anti bullying educational package has a significant positive impact on students' bullying knowledge, behavior and attitude that lead to decrease the rate of reported incidents of bullying victimization. **The study recommended** anti-bullying intervention programs should be applied continuously in schools to improve students' knowledge and behavior, thus help to reduce prevalence of bullying.

I. Introduction:

Bullying behaviors among school children represent a problem worldwide not only due to their increased prevalence but also because of their negative short- and long-term consequences experienced by those directly involved [1]. Bullying or peer victimizationis defined as a special form of aggressive with an imbalance of power, whereby a more powerful student repeatedly and intentionally causes harm to a weaker student [2]. Today, an estimated **200** million children and youth around the world are being victimized by their peers. More than one out of every three/five students **(20-29%)** are involved in bullying at least once per year. **23 %** of public schools reported that bullying occurred among students on a daily or weekly basis. **In Egypt,** according to National Center for Social and Criminal Research, **69%** of students reported being bullied or experiencing aggression from other students [3]. Also in a more recent Egyptian statistics **70** % of children with ages ranging between 13-15 years old are being bullied. This high percentage does not mean that children in Egypt are hostile. However, they are just not aware of the dangers of bullying that may lead a bullied person to commit suicide [4]. Bullying tends to increase throughout the elementary years, peak during early adolescent middle school years, and decline somewhat during later adolescent high school years, indicating that middle school is the setting with the highest prevalence [5] & [6].

Bullying can take the form of direct bullying, which includes physical and verbal acts of aggression such as hitting, stealing or name calling, or indirect bullying, which is characterized by social exclusion (such as excluding a child from a group to hurt him/her, or any other gestures or actions that occur in a less visible manner, etc) and rumors spreading. Recently there has been much interest in cyber-bullying, which can be broadly defined as any bullying which is performed via electronic means, such as mobile phones or the internet. The four main aspects of school bullying are the bully (perpetrator); the victim (recipient); the bully/victim (victim and perpetrator); and the bystander (witness) [2] & [7].

Researchers increasingly find that bullying is a problem that can be detrimental to students' well-being [8]. Students who are bullied have increased school avoidance, and difficulties with learning. It was estimated that over **160,000** kids refuse to go to school each day for fear of being bullied. Over **10%** of students who drop

out of school do so due to being bullied repeatedly [9]. These victims students are often suffer from psychosomatic problems like sleep difficulties, headaches and stomachaches, and mental health issues such as anxiety, low self- esteem, self-harm and suicidal ideation. For theBully-victims show poor social and emotional adjustment, depression and low social competence. The Students who are bullies show long-term issues such as academic problems, substance use, behavioral issues, and problems with the law and criminal behavior [10], [11].

Under the auspices of the National Council for Childhood and Motherhood (NCCM), Egypt's first national campaign (I'm against bullying) calling to end peer-to-peer violence was launched in partnership with the Ministry of Education and Technical Education (MOETE) in cooperation with the United Nations Children's Fund (UNICEF) and funded by the European Union (EU). "The Ministry is fully supporting this important national campaign and stressed the goal of the campaign is to raise awareness of the dangers of bullying among school children, teachers and their communities to identify and address bullying," according to the Minister of Education and Technical Education, "As Egypt steadily moves towards a full transformation of its education system through Education, creating a safe and enjoyable learning environment for children is among our priorities." [4]&[12].

School nurses have an important role in helping students to deal with bullying situations. Since the school nurse is not in a disciplinary or academic role, children are more likely to confide in the nurse and tell their secrets more comfortably. As a result, nurses are often on the front lines of bullying, being the first adult the victim and the bully go to for help, which makes school nurse in the ideal position to coordinate care for those involved in bullying episodes by building up a solid relationship with the students and showing themselves as approachable, gaining students' confidence, getting as much information as possible out of the situation, empowering them to take action, liaising with schools and parents about the bullying situations [13].

II.   Significance of the study:

Children who are healthier and are part of harmonious environments have learning advantages and a good academic performance [14]. Therefore, it is not only educators and those who work in schools but also health professionals who have a role in dealing with and supporting bullying situations between peers. Most recently, it was argued that bullying has been somewhat neglected by health professionals, and that it should be considered as an important safeguarding issue [7], [15].The school nurse is in an ideal position to conceptualize steps toward a safe school environment to address bullying; they promote evidenced-based education and programs related to bullying prevention that should include skills training for bullies and victimized children to increase their awareness about bullying and to change their attitudes and behaviors positively [16]&[17]. That's not all, but also, based on the important need in our Egyptian community, and in response to Egypt's first national campaign (I'm against bullying), this study was conducted for the aim to determine the effect anti bullying education package on both knowledge, and attitudes change as well as reported incidents of peer bullying victimization among preparatory school students.

Aim of the Study:
This study aimed to assess the effect of the developed anti-bullying educational package on knowledge and anti-bulling strategies to manage bullying and reported incidents of peer bullying victimization among preparatory School Students.

Research Hypothesis:
Implementation of an educational package was expected to improve knowledge and anti-bullying strategies hence to reduce reported incidents of peer bullying victimization among preparatory school students.

III.   Methodology:
- **Research design:**
Quasi-experimental design (One group pretest and posttest research design) was utilized.

- **Research Setting:-**
The study was conducted in three preparatory governmental schools located at El- Mokattam district affiliated to Cairo Governorate. El-Shaimaa preparatory school for boys, El-Shaimaa preparatory school for girls and Khaled Abn El-Waleed School located in El-Mokattam district provided by the Ministry of Education.

- **Subjects:**
- **Sample type and size :**
A stratified simple random sampling technique was used; three of five preparatory schools in El-Mokatam were selected randomly, the classes in these schools were further stratified into 3 levels based on

grade in preparatory schools then, three classes from each school covered all three preparatory grades were selected randomly. The sample size was estimated to be **527** students, using calculation of:

$$\text{Sample size, n} = N * \frac{\frac{Z^2 * p * (1-p)}{e^2}}{[N - 1 + \frac{Z^2 * p * (1-p)}{e^2}]}$$

Where **N** is the population size, **E** margin of error, and the **z**-score is   the number of standard deviations a given proportion, at confidence level 95%, margin of error 4. While, there as 62 participants were excluded because of incomplete data and absenteeism during program sessions. The final sample consisted of **465** students.

- **Inclusion criteria:** Age of the students ranged from 12 to 16 years.
- **Exclusion criteria:** Students have mental illness, non-complete response to the questionnaire, and dropping-out of school.

- **Tools of data collection:-**

Three tools were utilized for the purpose of the study.

- **First tool: Preparatory School Students Structured Interviewing Questionnaire :** it was composed of the following parts :-
- **1st part:** demographic characteristics of the school students and their families consist of 6 questions related to school students including (gender, age, grade, absenteeism rate, previous academic failure). As well as 7 questions related to students' families including (age,   parental educational level, parent's marital status and family income).
- **2nd part:** Student's knowledge about bullying**,** it included **12** multiple choice questions related to the following**:** meaning, types, causes and risk factors, characteristics and impact of bulling.
- **3rd part:** Anti bullying strategies, to assess student's bullying behavior for dealing with bullying situations,it consist of   **27** questions covering the following items**:** 11 questions reflect positive behavior for dealing with bullying situations (seeking social support, confrontation, and ignoring), **7** questions related to negative behavior including self-blaming and retaliation and **9** questions related to role of bystanders.

Students' responses to knowledge and anti-bullying strategies questionnaire were checked with model answered. The responses are scored 0 to 1, (0) for incorrect answer, (1) point for correct answer. The overall knowledge score was calculated as mean value, range from **0 to 12**. Similarly, in Anti bullying strategies questionnaire, the responses are scored (0) for negative behavior and (1) for positive behavior. The overall anti bullying strategies score was calculated as mean value, range from **0 to 27**. The higher score is the better knowledge and behavior of the students for responding to bullying situations.

- **Second tool: Bully Attitude Scale (ABS):** The scale was developed by **(Craven J.S, 2014)** [18]**,** for measurement of middle school students' attitudes toward bullying, where attitudes are defined as children's predispositions to evaluate bullying behavior favorably or unfavorably. The scale consists of **19**. The scale uses 4-Likert format**;** from 4 = I agree a lot, to 1 = I disagree a lot. The possible range of scores was 19 to 76, where higher scores indicate attitudes more supportive and approving of bullying. The Test reliability of the English version was established by using the coefficient alpha (**0.803.**). In the present study the Arabic translated version, coefficient alpha was **0.817** which showed good internal consistency construct validity.

- **Third tool: Multidimensional Bullying Peer Victimization Scale (MPVS):** The scale was developed by **(Betts et al., 2015)** [19]**,** The MPVS is used to reflect prevalence in types of bullying victimization such as physical, verbal, attacks on property, social and electronic forms of victimization. The scale consists of **20** questions covering **5** subscales with **3** options, in which the respondents have ever felt the situation given has had never happened, happened before once, or happened more than once. Scores on the total scale have a possible range of **0 to 40** and a possible range of 0 to 8 on each of the five subscales. Higher scores reflect more victimization. Internal reliability coefficients have been reported for the original scale (**α=0.87).** While Arabic translated version of all scale in the present study coefficient alpha was **0.79** which is considered very well in educational research.

- **Tool validity and reliability:**

The researchers revised the recent literature related to the present study title and reviewing the current national and international articles and scientific journals, then design the first tool of data collection. The second and third tools, ABS & MPVS were translated and back-translated into Arabic language. The final translated

versions were revised as well as bullying guiding booklet by experts for content validity and according to their opinion, modification were applied.

- **A pilot Study:**

A pilot study was carried out, on 10% (50 students) of the total study sample to test the feasibility and applicability of the study in terms of its setting, tools, time needed…etc. Results acquired were valuable in evaluation and modification of the tools; these subjects were later excluded from the study subjects.

- **Field Work:**

After securing official permissions to carry out the study from directorate of education and school directors including the aim of the study, all preparatory school students were approached in their own class with the help of an undergraduate students. The field work was carried out within of the academic year of 2018/2019 two days weekly. Participants completed the questionnaires after a brief and "nondirective explanation of questionnaires" was administered to students by the researchers wishing to participate as volunteers in the study and to ensure the students correctly filling out questionnaires that were filled in about 40 to 45 minutes. The researcher started to conduct the education program after finishing the pre-test.

- **Program Development:**

The Anti-bullying Education Package was developed on four phases include the followings:

- **Assessment phase:** The program was developed based on preprogram assessment questionnaire as well as literature review.

- **Planning of the Educational Program:** General and specific objectives were established based on the result obtained from assessment phase after reviewing of the extensive literature and other available resources. The program consisted of four sessions with two sessions/ week for every class, the duration of each session ranged from 40 to 50 minutes.

   The content of these sessions can be summarized in the followings:

First session: Basic information about peer bullying; the meaning of bullying, who bully/bullies, reasons for,types of bullying, and impact of bulling on students.

Second session: In order to change the attitude and behavior related to bullying; determining rules to be obeyed in the classroom, writing mottos for desired behaviors and hanging it up in the classroom and explaining their influence on decreasing bullying**.**

Third session: Identifying what bystanders and victims should do in response to bullying**,** teaching tactics that they could use and correct students' behavior for dealing with bullying. (e.g., stay connected, seeking social support, set Limits, and confrontation, self-defense, ignoring and use confident body language (**Anti bullying strategies**).

Forth session: Sharing experiences about bullying, listening to the stories, answering the students' questions and using restorative practice to address cases of bullying.

The educational package consisted of a video CD, posters, printed mottos, songs about bullying and informational booklet on bullying behavior.

- **Program Implementation Phase:** The program was implemented in the previously mentioned schools. The bullying education guiding booklet was distributed for the students at the end of program implementation.

- **Program Evaluation:**The effect of the program on the students was evaluated by comparing the pre and post assessment of the students regarding their knowledge, attitude and anti-bullying strategies, and finally the reported incidence of peer bullying victimization by using the same pre-intervention format.

- **Statistical Design:**

Statistical presentation and analysis of the present study was conducted using the Statistical Package for the Social Sciences (SPSS) version 19, continuous data were expressed as the mean, standard deviation. Categorized data were expressed as number and percentage. P- Value less than **0.05** were considered statistically significant. In addition Paired t-test, ANOVA test was used.

- **Ethical Considerations:**

Permissions to involve pupils in the study were initially sought from the district educational authorities. During the initial visit to each school, pupils were informed about the study objective and procedures. All data

were confidential and used only for the research purpose and an oral and written consent was obtained from each student before starting the data collection. As well as, the students were asked to take the leaflet home to their parents or main caretakers, who could telephone the researchers, or ask their children directly to refuse to join the study. The students themselves also had the right to refuse to participate in this study by returning blank copies of questionnaire.

IV.   Results:

Table (1) showed thatthe mean age of the students was **14.071±1.847** years, **66.88%** of them were male. **36.77 %** of the students were studying in the first grade.

Table (2) indicated that **4.08 %** of the mothers had higher education qualification; while **9.67%** of the fathers had higher education degrees. Regarding tomarital status, **79.13%** of the students lived with their parents.

Figure (1): illustrated that **(64. 51%)** have been bullied more than once.

Table (3) showedthat mean percent score of students' knowledge was improved post program implementation **86.75%** compared by preprogram implementation **26.16%** with highly statistical difference **(P<0.000*)**.

Table (4): revealed that the mean posttest students anti-bullying strategies score was **82.92 %** compared by the mean pretest score **41.59%** with statistical difference **(P<0.000*).**

Table (5): clarified that; mean posttest score of students' bullying attitude is **25.125±3.455** lower than mean pretest score **49.865±7.510** with statistical difference **(P<0.000*).**

Table (6) indicated thatmean percent posttest multidimensional peer victimization score (MPV) of the school students was reduced post program implementation in both sex, for males **54.38%** compared by the mean pretest **57.76%. Females 40.59%** compared by the mean pretest **48.14%** with statistical difference **(P<0.001)** and **(P<0.000)** respectively.

Table (7) revealed that mean score of MPV is higher among students with age from 12 to 14 and who are at the 1st grade of preparatory school with statistical significant differences **(p< 0.008)** and **(p< 0.012)** respectively. Regarding sex, mean score of MPV is higher among boys with significance differences **(p< 0.001).** Also, mean score is higher among those students with previous academic failure with statistical significant difference **(p< 0.007).**

Table (8) indicated that peer victimization of bullying was associated with mother education level with statistical significance differences **(P<0.009)** While, neither there was no statistical significance with peer victimization and marital status nor family income.

Table (1): Distribution of the school Children According to their Socio- demographic Characteristics (n=465)

Student's Characteristics	N	%
Age:		
• 12 -14.	271	58.27
• 15 -16.	194	41.73
Range.	**12-16**	
Mean± SD.	**14.071±1.847**	
Sex:		
• Male	311	66.88
• Female	154	33.12
Male to female ratio.	**1.834**	
Grade:		
• 1st preparatory	171	36.77
• 2nd preparatory	166	35.69
• 3rd preparatory	128	27.53
Child absence from school :		
• Yes	384	82.58
• No	75	17.42
Absenteeism days in the last previous month:		
• None	68	14.62
• 1-5.	278	59.78
• 6-10.	111	23.87
• 11-15.	8	1.72
Previous academic failure :		
• Yes	139	29.89
• No	326	70.11

Table (2): Distribution of the Families of School Children According to their Socio-demographic Characteristics (n=465).

Student's Characteristics	N	%
Age of the mother:		
• 33 ≤ 38	265	56.99
• > 38 : 45	200	43.01
Age of the father:		
• 35 ≤ 40	166	35.69
• > 40 : 50	299	64.30
Mother education level:		
• Illiterate	84	18.06
• Read and write.	199	41.79
• Elementary education	97	20.86
• Secondary education.	66	14.19
• Higher education.	19	4.08
Father education level:		
• Illiterate.	62	13.33
• Read and write	145	31.18
• Primary school graduate.	94	20.21
• Secondary school graduate.	119	25.59
• University graduate.	45	9.67
Parents marital status:		
• Deceased mother	19	4.09
• Deceased father	34	7.31
• Deceased parents	6	1.29
• Divorced parents	38	8.18
• Married (Cohabitation)	358	79.13
Family Income:		
• 2000 - 3000	246	50.75
• >3000 - 5000	219	49.25

Figure (1): Distribution of School students involved in Peer Victimization of Bullying.
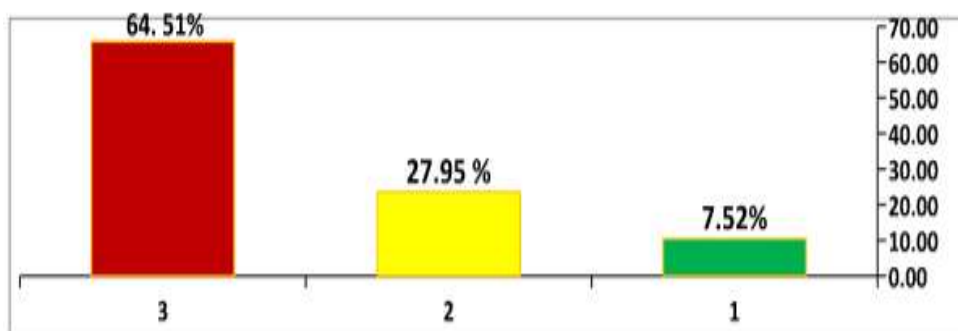

Table (3): Distribution of the School Students According to levels of Bullying knowledge Pre and Post Program Implementation (N=465):

Correct Bullying Knowledge	The Educational Program Phases	
	Preprogram Implementation	Post Program Implementation
	Correct N (%)	Correct N (%)
Meaning.	50 (10.75)	452 (97.20)
Difference between bullying and conflict.	3 (0.64)	421 (90.53)
Types of bullying.	88 (18.92)	435 (93.13)
Reasons and risk factors.	111 (22.42)	440 (94.62)
Impact of bullying on bullies	22 (4.73)	425 (91.39)
Impact of bullying on victims.	122 (26.23)	438 (94.19)
Impact of bullying on bystanders.	47 (10.10)	423 (90.96)
Mean ±SD **Mean (%)**	**3.15 ± 2.46** **26.16 %**	**10.49 ± 1.76** **86.75%**
Paired T-test	T=−38.21 **P= 0.000** *Significant (P<0.05)	

Table (4): Distribution of the School Students According to Anti Bullying Strategies Pre and Post Program Implementation (N=465):

Anti-Bullying Strategies	The Educational Program Phases			
	Pre- Program Implementation		Post Program Implementation	
	Positive behavior N (%)	Negative behavior N (%)	Positive behavior N (%)	Negative behavior N (%)
Seeking social support.	162 (38.83)	303 (65.16)	422 (90.75)	43 (9.25)
Confrontation/Set limits.	177 (38.06)	280 (61.93)	399 (85.80)	66 (14.19)
Ignoring and avoiding	141 (30.32)	324 (69.68)	382 (82.15)	80 (17.85)
Self-blaming.	288 (61.93)	221 (38.07)	419 (90.10)	46 (9.89)
Retaliation.	188 (37.97)	277 (62.03)	332 (71.39)	133 (28.6)
Role of bystanders.	185 (39.78)	280 (60.22)	431 (92.68)	34 (7.31)
Mean±SD **Mean (%)**	**11.23±3.65** **41.59 %**		**22.29± 2.09** **82.92 %**	
Paired T-test	T=22.772 P= **0.000** *Significant (P<0.05)			

Table (5): Distribution of the School students According to their Total Bully Attitude Mean Score throughout the Educational Program Phases (n=465).

Education program phases:	Mean Attitude score	Difference	Paired T-test	
	Mean ± SD	Mean ± SD	T	P Value
Preprogram implementation Post program implementation	49.865 ± 7.510 25.125 ± 3.455	-17.640 ± 2.825	-33.863	0.000*

Table (6): Distribution of Male and Female School Students According to Subtypes of Multidimensional Peer Bullying Victimization (n=465).

Subtypes of Multidimensional Peer Victimization (Bullying)	Sex Students	Program Phases	Mean ± SD	Mean %	Paired T- Test	
		Pre Post			T	P Value
Verbal Victimization	Males	Pre	5.612±1.549	70.15	2.512	**0.001**
		Post	5.198±1.361	64.97		
	Females	Pre	5.350±1.340	66.87	2.497	**0.000**
		Post	4.081±1.200	51.01		
Physical Victimization	Male	Pre	5.333± 1.414	66.66	2.066	**0.001**
		Post	5.097± 1.302	63.63		
	Females	Pre	2.571±1.112	35.88	2.073	**0.001**
		Post	2.192±1.101	28.65		
Social Manipulation	Male	Pre	5.091±1.281	63.63	1.686	0.219
		Post	5.107±1.223	63.83		
	Females	Pre	5.650±1.399	70.62	2.315	**0.000**
		Post	4.892±1.303	61.15		
Attacks on Property	Male	Pre	4.660±1.371	58. 25	2.542	**0.001**
		Post	4.241±1.201	53.01		
	Females	Pre	3.151±1.141	40.63	2.819	**0.001**
		Post	3.012±0.611	37.76		
Electronic Victimization	Male	Pre	2.410±.0797	30.12	2.753	**0.001**
		Post	2.112±0.559	26.40		
	Females	Pre	2.244±0.529	28.05	2.620	**0.000**
		Post	1.333±0.309	16.66		
Total Mean Score	**Males**	Pre	**23.106 ± 6.412**	**57.76**	**4.832**	**0.001**
		Post	**21.755 ± 5.646**	**54.38**		
	Females	Pre	**19.256 ± 5.521**	**48.14**	**5.012**	**0.000**
		Post	**16.239 ± 4.524**	**40.59**		

Table (7): Correlation between Socio-demographic characteristics of School students and Multidimensional Peer Bullying Victimization (No=465).

Items of socio-demographic data	Multidimensional Peer Victimization of Bullying	ANOVA	
		F	P-Value
Age:			
• 12 ≤ 14.	23.223±6.702	5.676	**0.008***
• 15-16.	19.141±5.230		
Sex:			
• Male students	23.106 ± 6.412	6.646	**0.001***
• Female students	19.256 ± 5.521		
Grade:			
• 1st preparatory	23.821±6.620	5.177	**0.012***
• 2nd preparatory	22.285±6.892		
• 3rd preparatory	17.442±4.280		
Absenteeism days:			
• None	20.795±5.946	1.252	0.796 NS
• 1-5.	21.187±6.155		
• 6-10.	21.481±6.133		
• 11-15.	21.280±5.378		
Previous academic failure:			
• Yes	23.167±6.525	5.871	**0.007**
• No	5.408±19.195		

Table (8): Correlation between Socio-demographic characteristics of Families of School Children and Multidimensional Peer Bullying Victimization (No=465).

Items of socio-demographic data	Multidimensional Peer Victimization (MPV)	ANOVA	
		F	P value
Age of the mother:		0.123	0.189 NS
• 32 ≤ 40	21.132±5.789		
• > 40	21. 229±6.078		
Age of the father:		0.874	0.918 NS
• 35 ≤ 45	21.723±6.191		
• > 45	20.639±5.869		
Mother education level:		4.984	**0.009**
• Illiterate	22.563±6.295		
• Read and write.	23.000±6.547		
• Primary school graduate.	22.098±6.078		
• Secondary school graduate.	20.289±6.147		
• University graduate.	17.969±4.744		
Father education level:		0.774	0.135 NS
• Illiterate.	21.409±6.170		
• Read and write.	21.287±6.077		
• Primary school graduate.	21.419±6.142		
• Secondary school graduate.	21.215±6.085		
• University graduate.	20.579±5.443		
Parents' marital status:		1.172	0.069 NS
• Married.	21.174±5.496		
• Not married (divorced, widow, widower)	21.244±6.387		
Family Income:		0.757	0.342 NS
• 2000 - 3000	20.889±5.566		
• >3000 - 5000	21.256±5.826		

V. Discussion:

School bullying is a serious problem that affects the daily school lives of its victims [12]. The present study findings highlight the importance of developing strategies of prevention and early detection of bully victimization among young adolescents. Prevention and intervention strategies must incorporate input from students themselves, so it's important for applying educational programming on age-appropriate strategies for conflict resolution and raising awareness among students about bullying, changing their attitudes and behaviors positively. As well as helping them how to deal with bullying situations.

Results of the present study revealed that the majority of the school students' pre-program implementation didn't have a clear understanding about the nature and meaning of bullying. The term 'bullying' is not widely known in Egypt as most of the bullying behaviors are identified as 'violence', mostly of the students were unable to differentiate bullying from reciprocal aggression, that is inconsistent with bullying

definition in which bullying occurs when a victim is unable to defend him or herself. As well as, only, less than one fifth of the students reported that the victim have some unique reasons such as body appearance (thin or fat, short or long) followed by facial appearance are reasons for a student becomes a victim of bullying. This is in agreement with **Oliveira et al.,** [20]**,** who found in their study that victims often present characteristics that distinguish them from most of their peers, such as obesity, thinness.

Meanwhile, pre-program implementation, the results revealed that, school students had negative anti bullying strategies and unsure how to handle the bullying situation. More than half of the students have negative response to bullying situations with retaliation and physical aggression, this negative behavior just satisfies a bully and fighting back is dangerous, because someone could get hurt. In addition, around two thirds of the students didn't seek social support and are unlikely to report bullying incidents to school personnel due to social stigma or fear of revenge. This is in congruence with **Waseem M.,**[21] who reported in his Egyptian study that, many children do not inform their teacher or parents that they were being bullied. Moreover, **Asimopoulos et al.,** [22] found in their study that, the victims-students avoid seeking help from the adults. Furthermore, more than half of the bystanders' children didn't intervening when their classmates are bullied. This is with the same line with **Abdulsalam et al.,** [23,]**,** who found in their study that around half of other students never or rarely intervening and fail to act protectively in bullying cases.

Conversely, post program implementation, the study finding indicated that there are significant positive improvement in mean score of the students' bullying knowledge and anti-bullying strategies. The majority of the students had identified numerous positive strategies to protect themselves from bullying, asking for help from an adult and seeking social support rather than becoming sensitized when reporting bullying. This is in the same line with similar study conducted by **Yokoo et al.,** [24] who found that students' knowledge was greater at posttest than at pretest.   Furthermore, **Shams et al.,** [25]**,** reported in their study that educational intervention increased mean score of knowledge of students and behavior about bullying.

Concerning attitude toward bullying, post program implementation, results revealed shifting in mean score of student bullying attitude with statistical significance. Obviously, using different educational package that consisted of a video CD, posters, role play, printed mottos and informational booklet on bullying behavior were instrumental in creating awareness about bullying, the students recognize that bullying is unacceptable behavior and forbidden. As well as, reviewing the students' experience of bullying with role-plays and ensuing discussions were mutually generative in creating empathy, help to understand feeling of others and support negative attitude toward bullying. Moreover, feeling of guilty toward bullying behavior was noticed during program session that was evidenced by crying of some of the students. This is in accordance with **Albayrak et al.,** [26]**,** who found in their study that education program for adolescents produced positive improvements for adolescences' bullying attitude and behavior. Moreover, **Espelage et al.,** [27]**,** found in their study that empathy and understanding of how youth see things from others' point-of-view may be important factor in bullying.

Regarding peer victimization of bullying (fig 1), preprogram implementation, The survey of the preparatory school students revealed significant reports of bullying; approximately two thirds of the students sample reported that they having been bullied more than once during the last month. This is in consistent with **Abdalqader et al.,** [28]**,** who found in their study that more than half of the middle school students have been bullied before with the percentage of 63.5%.

Gender differences in the subtypes of bullying and victimization play different roles in the pupils' health. Preprogram implementation; the results revealed that mean scores of all subtypes of victimization are higher among boys than girls (table 6). Except for social manipulation which has a higher mean score for girls' victims. This argued that males use physical aggression more, whereas females use emotional aggression instead. It is common among male children to kick, beat and injure each other without complaining, or reporting to any authority. On other hand, those females are mature faster socially than males; so that, they use their social skills to hurt their peers, sabotage their social standing, or spreading rumors. This result is in accordance with many previous studies such as **Al-Rashid** [29]and **Krämer et al.,** [30]**,** who found in their similar studies that male adolescents are more frequently the victims of bullying. Moreover, **Chokprajakchat et al.,** [31]**,** found in their study that boys are more likely to be physically victimized and girls tend to be victims of relational victimization.

After program implementation, there were significance differences between pre and post mean scores of subtypes of peer bullying victimization in both sexes, exception for social victimization among boys. Obviously, this significance differences were more remarkable among girls than boys; this may be explained that empathy is higher in girls than in boys. Undoubtedly, this improvement reflect effectiveness of educational package that are helpful in empowering the bullied students with strategies to respond to bullying behaviors and encourage bystanders to take positive action and to take a stand against bullying situations. Moreover, approaches during the education program such as using restorative practice during program sessions, in which the bullied victim students and bystanders describe the bullying situations they experienced and how it affected them, on other hand the bully students start to administer rational for their behavior and bring their apologize

were helpful to decrease incidence peer bullying victimization. This is in the same line with **Al-Rashid, [29],** who found in her study that there is statistical significance differences between pre and post mean scores of types bullying in both sex. Moreover, **Donohoe and O'Sullivan [32],** found in their study that, there was a significant reduction in bullying victimization post intervention.

Regarding to statistical relation among the study variables; the study revealed (table 7) that younger students and who are at lower levels of preparatory school experience more peer victimization of bullying than older students and those at the higher class level with statistical significance differences. This could be due to younger students have not yet acquired the social skills to deal effectively with bullying incidents, as well as the younger student tend to possess less physical and mental power so unable to defend to themselves. This result is in agreement with various previous studies such as **Yen et al., [13],** and **Defunke, [33],** who reported in their studies, that younger and those students in junior classes were more likely than older and those students in junior classes to report victimization.

Furthermore, the current study indicated that peer victimization is associated negatively with academic performance, which confirms that bully victims students do poorly in school. This could be because of lack of concentration and participation due to fear or anxiety. This result matched with **Abdalqader et al., [28],** and **Shaheen et al., [34],** who found in their studies that students being bullied were negatively correlated with academic performance of students.

The results also illustrated that; mean scores of peer victimization for bullying is higher for students with lower mothers' educational level with statistical significances differences and vice versa. This finding confirmed that the parents should also participate in planning and implementing bullying prevention program in order to be equipped with adequate knowledge to support their children. Similarly, **Turkmen et al., [35],** found in their study that students whose parents had a higher level of education, victimhood have been observed at a minimal level and vice versa. While, **Healy et al., [36],** found that there was no significant relationship between the level of parents' education and bullying victimization behaviors of their sons.

In respect to other parents' demographic characteristics, such as marital status and family income, the results didn't show significant association with peer victimization. This is consistent with **Abdalqader et al., [28]** who found in their study no significant difference between peer victimization with parent's income and marital status. On the contrary, **Garmy et al., [37],** found in their study that children not living with their parents were more likely to be bullied. Moreover, **Shaheen et al., [34],** found that adolescents belonging to low-income families experienced bullying more than those from moderate-income families. This means that the relationship between socioeconomic status and being bullied is varies across communities. Moreover, there is other possible explanation for the present study, that the low percentage of not married families is not presentable to show significance difference**.**

VI.   Conclusion:

In the light of the study findings, the developed anti-bullying educational package has a significant positive impact on students' knowledge, behavior and attitude related to bullying, that lead to decrease the rate of bullying victimization. Therefore, the research hypothesis was proved and supported by the researcher.

Recommendations:
- Different and continues programs intervention should be developed and applied in schools to be conducted in a repeated manner to improve students' knowledge and behavior about bullying, thus help to reduce prevalence of bullying.
- Effect of anti-bullying education program should be evaluated on long term basis.
- Conduct in-service training program for teachers and parents about bullying.

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