RESULTS

I-General characteristics of the studied sample

Table (1): Distribution of the studied sample according to some studied variables.

Characteristic		Frequency Total number (420)	Percent (100.0)
Type of school			
	Public school students	200	47.6
	Private school students	220	52.4
Residence	Urban	280	66.7
	Rural	140	33.3
Gender	Boys	219	52.1
	Girls	201	47.9
Grade	First	148	35.2
	Second	139	33.1
	Third	133	31.7
Engaging in violence			
	Engaged	281	66.9
	Not engaged	139	33.1
Victimization			
	Victimized*	255	60.7
	Not victimized	165	39.3
Inducing violence			
	Perpetrators**	189	45.0
	Not perpetrators	231	55.0

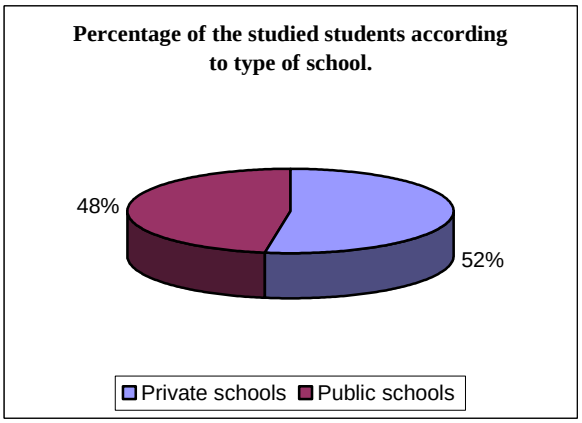
*** Victimized** includes "victims only and both victims and perpetrators"

**** Perpetrators** includes "perpetrators only and both victims & perpetrators"

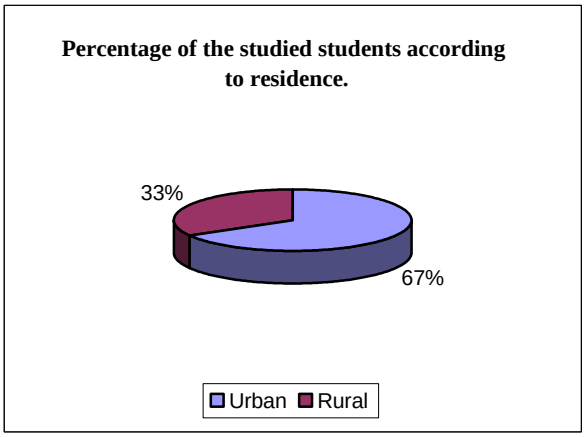
This table shows that more than half (52.4%) of the studied students belonged to private schools, two thirds of them were urban, more than half (52.1%) were boys, more than one third (35.2%) were of the first grade, 66.9% engaged in violent acts, 60.7% were victims and about half (45%) were perpetrators of violence.

Chart (1): Distribution of the studied sample according to some studied variables.

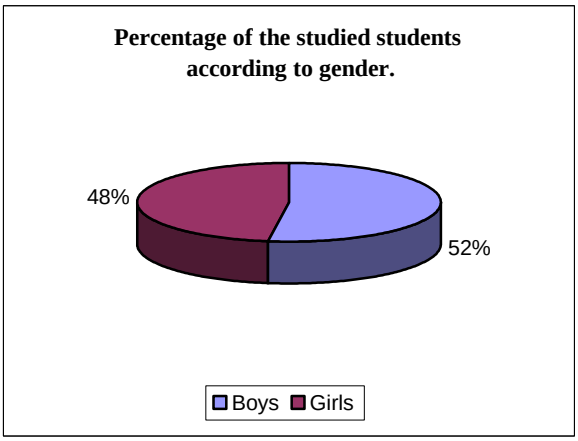
a)



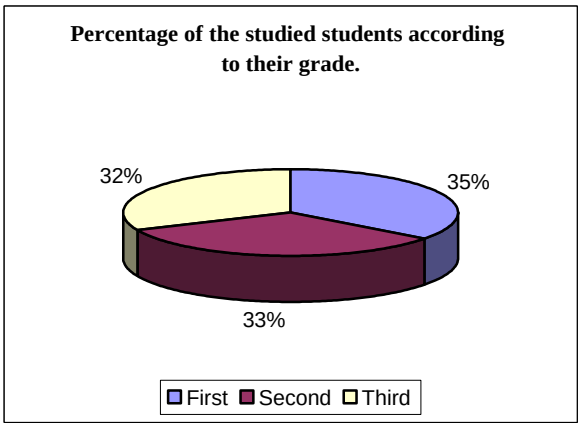
b)



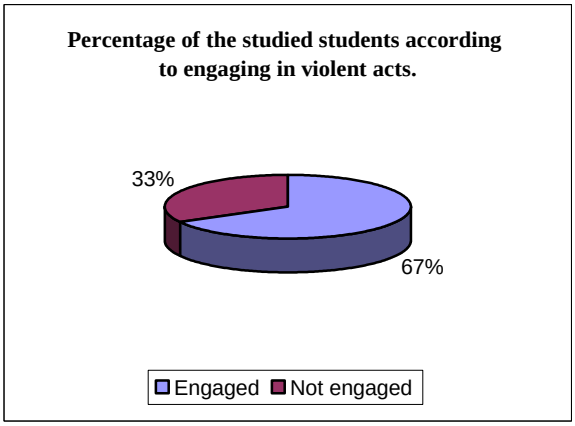
c)



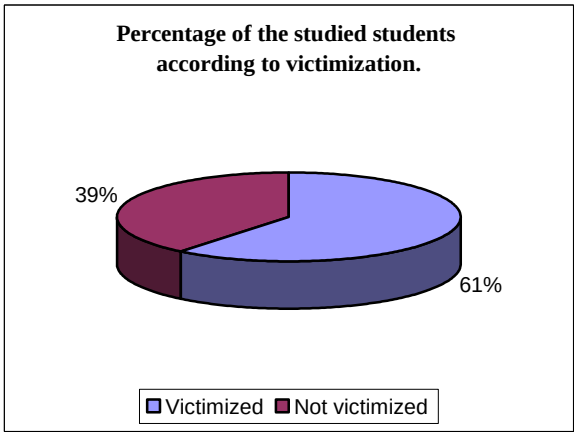
d)


Percentage of the studied students according to their grade.
32%
35%
33%
First
Second
Third

e)


Percentage of the studied students according to engaging in violent acts.
33%
67%
Engaged
Not engaged

f)


Percentage of the studied students according to victimization.
39%
61%
Victimized
Not victimized

g)

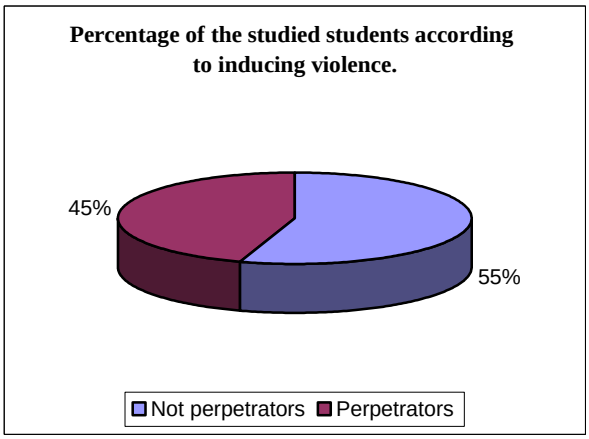

Percentage of the studied students according to inducing violence.
45%
55%
Not perpetrators
Perpetrators

Table (2): Distribution of the studied students according to demographic characteristics and type of school.

Characteristic		Public school N=200		Private school N=220		Total N=420		"Z"	P
		No	%	No	%	No	%		
Gender	Boys	98	49.0	121	55.0	219	52.1	-1.23	>0.05
	Girls	102	51.0	99	45.0	201	47.9	1.23	>0.05
Grade	First	73	36.5	75	34.1	148	35.2	0.52	> 0.05
	Second	67	33.5	72	32.7	139	33.1	0.17	> 0.05
	Third	60	30.0	73	33.2	133	31.7	-0.7	> 0.05
Residence	Urban	118	59.0	162	73.6	280	66.7	-3.2	<0.001
	Rural	82	41.0	58	26.4	140	33.3	3.2	<0.001
Birth order									
	First	60	30.0	88	40.0	148	35.2	-2.14	<0.05
	Middle	73	36.5	73	33.2	146	34.8	0.71	> 0.05
	Last	67	33.5	59	26.8	126	30.0	1.49	> 0.05
Age in years (11-16**)**		**Mean**	**SD**	**Mean**	**SD**			**"t"**	**P**
		13.6	±1.02	13.4	±0.95			1.67	>0.05

This table demonstrates that more than half (55%) of private school students were boys. Regarding the order of child birth, the majority of private school students (40%) were the first among their sibs. This table also shows that there was a highly significant statistical difference (P<0.001) between public and private schools regarding residence.

Chart (2): Studied students according to residence

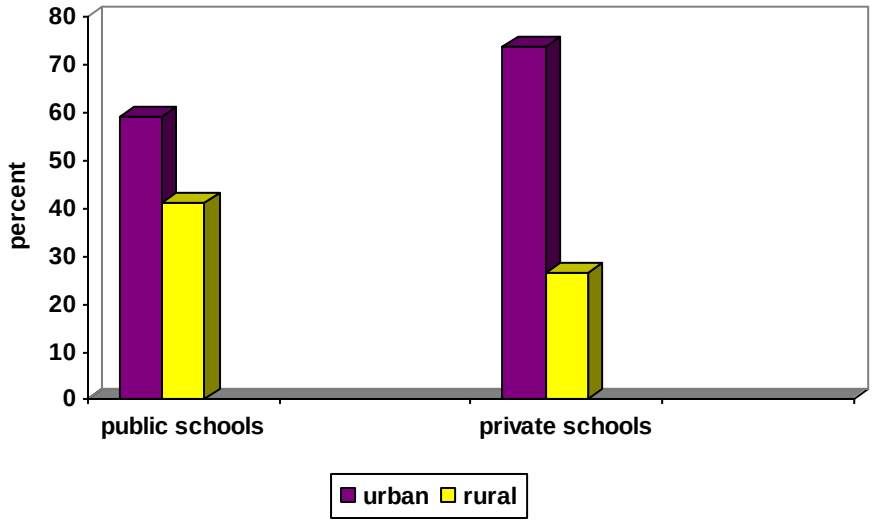


Table (3a): Distribution of the studied students according to gender and engaging in violent acts.

Gender / Engaging in violence	Boys		Girls		Total		Z	P
	No	%	No	%	No	%		
Engaged	173	79.0	108	53.8	281	66.9	5.5	<0.001
Not engaged	46	21.0	93	46.2	139	33.1	-5.5	<0.001
Total	219	100.0	201	100.0	420	100.0		

Table (3b): Distribution of the studied students according to gender and reporting of violent acts.

Gender / Reporting violence	Boys		Girls		Total		Z	P
	No	%	No	%	No	%		
Neither	46	21.0	93	46.2	139	33.1	-5.4	<0.001
Victim only	41	18.7	51	25.4	92	21.9	-1.7	<0.05
Perpetrator only	18	8.2	8	4.0	26	6.2	1.8	<0.05
Both(vic&per)	114	52.1	49	24.4	163	38.8	5.8	<0.001
Total	219	100.0	201	100.0	420	100.0		

These tables demonstrate that more than two thirds (66.9%) of studied students have engaged in violent acts. The majority of boys (79%) have engaged in violence either as victims only (18.7%), perpetrators only (8.2%) or both "victims & perpetrators" (52.1%), while 53.8% of girls were engaged in violent acts with statistically significant difference in between them (P<0.001).

Chart (3): Reporting violent acts by studied student.

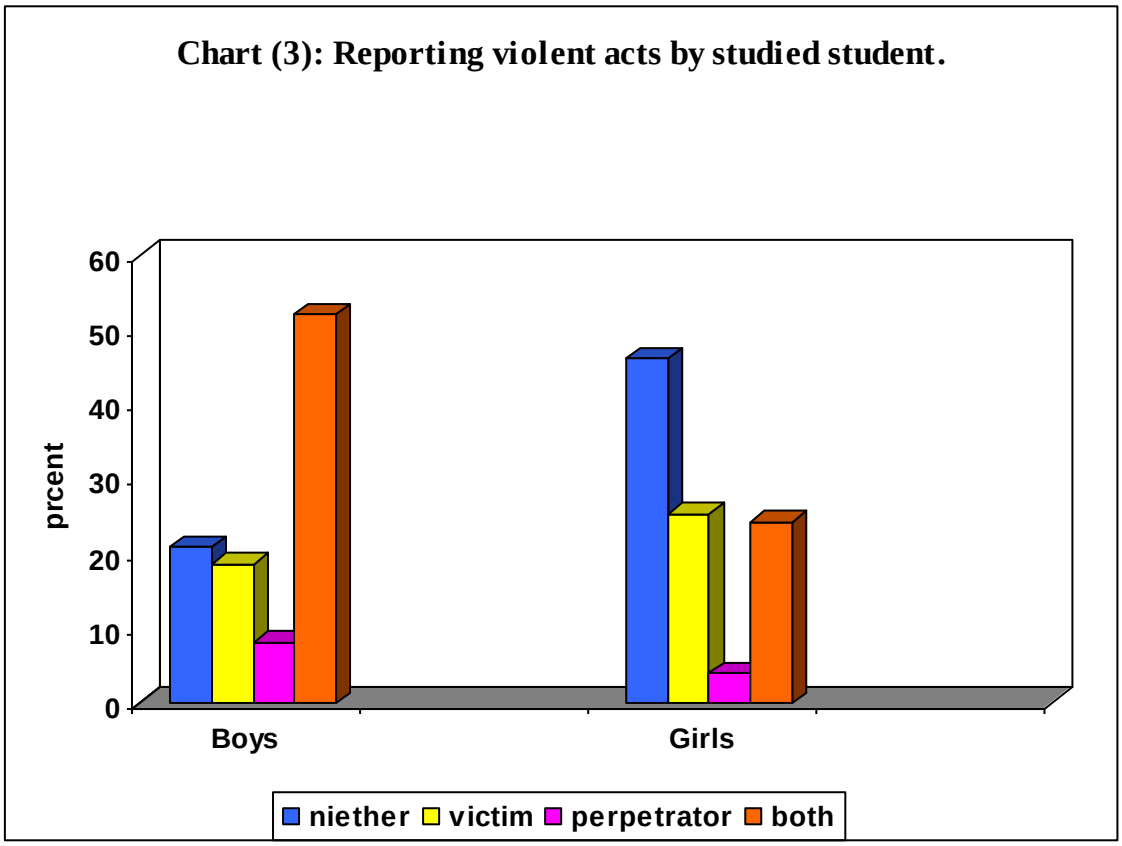


Table (3c): Distribution of the studied students according to type of school and reporting of violent acts.

School / Reporting violence	Public school		Private school		Total		Z	P
	No	%	No	%	No	%		
Neither	58	29.0	81	36.8	139	33.1	-1.7	<0.05
Victim	54	27.0	38	17.3	92	21.9	2.4	<0.01
Perpetrator	16	8.0	10	4.5	26	6.2	1.5	>0.05
Both(vic&per)	72	36.0	91	41.4	163	38.8	-1.1	>0.05
Total	200	100.0	220	100.0	420	1000		

This table shows that private school students were neither victims or perpetrators at higher percentage (36.8%), while public school students were victims at higher percentage (27%). These differences were statistically significant (P<0.05).

II-Victimization among the studied students in the current academic year

Table(4): Distribution of the studied students according to type of school and victimization .

Victimization	Public school		Private school		Total	
	No	%	No	%	No	%
Not victimized	74	37.0	91	41.4	165	39.3
Victimized*	126	63.0	129	58.6	255	60.7
Total	200	100.0	220	100.0	420	100.0

X^2 =0.84 **P >0.05**

* Includes "victims only" and both "victims & perpetrators"

This table shows that there was no statistically significant difference between public and private schools (P>0.05) regarding the prevalence of victimization .

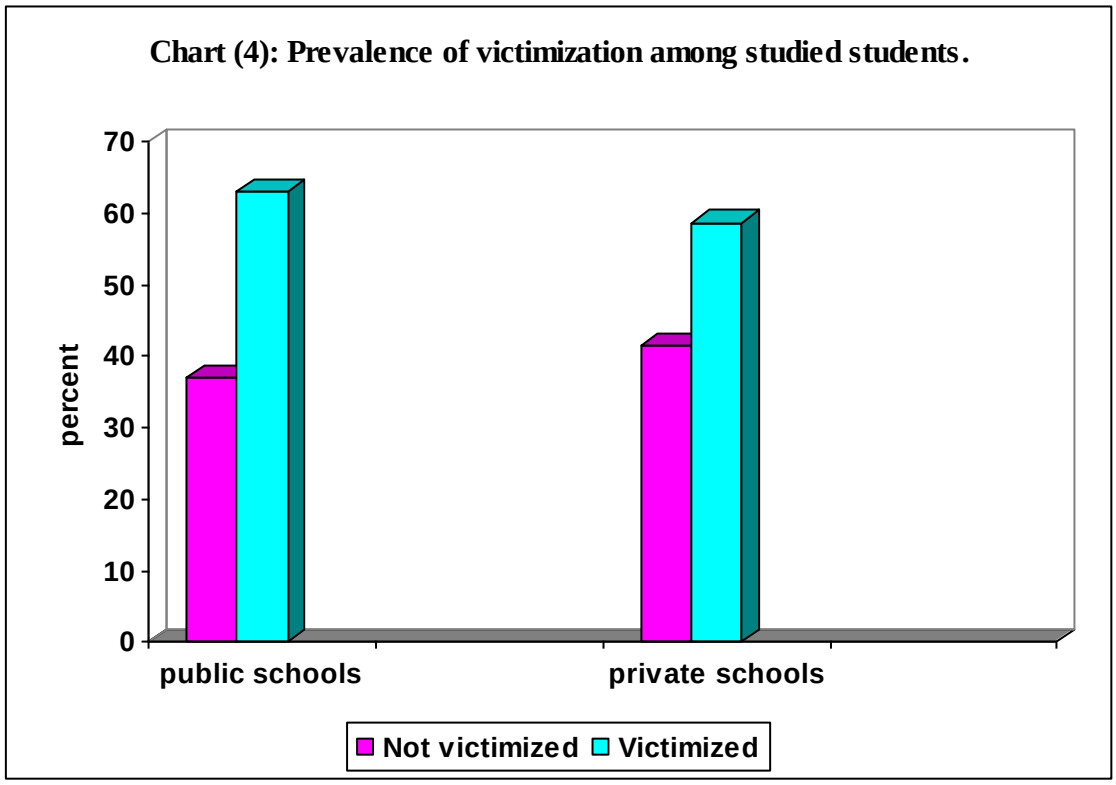


Chart (4): Prevalence of victimization among studied students.
70
60
50
40
30
20
10
0
percent
public schools
private schools
Not victimized
Victimized

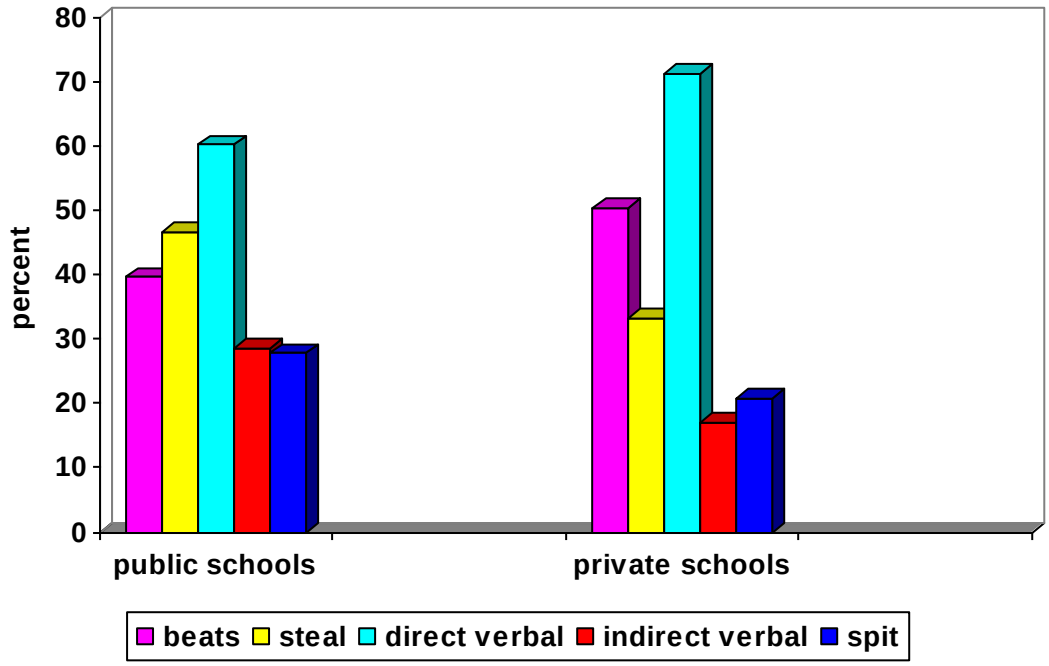
Table (5): Distribution of the studied students according to gender and victimization.

Table (6): Distribution of the victimized students according to type of school and types of violent acts.

Violent acts	Public school N= 126		Private school N= 129		Total N=255		Z	P
	No	%	No	%	No	%		
Beats	50	39.7	65	50.4	115	45.1	1.7	<0.05
Steal	59	46.8	43	33.3	102	40.0	2.2	<0.05
Direct verbal	76	60.3	92	71.3	168	65.9	1.85	<0.05
Indirect verbal	36	28.6	22	17.1	58	22.7	2.19	<0.05
Spit	35	27.8	27	20.9	62	24.3	1.3	>0.05

This table demonstrates that students of private schools exposed to beats and direct verbal violence at higher percentage (50.4% & 71.3% respectively). On the other hand, public school students exposed to stealing and indirect verbal violence at higher percentage (46.8% & 28.6% respectively). These differences were statistically significant (P<0.05).

Chart (5): Forms of violent acts among victimized students.



Table(7): Distribution of the beaten students according to gender and observed sequelae of beating.

Gender / Sequelae of beating	Boys		Girls		Total		Z	P
	No	%	No	%	No	%		
Non	56	68.3	29	87.9	85	73.9	-2.16	<0.05
Fractures	12	14.6	1	3.0	13	11.3	1.78	<0.05
Wounds & contusions	14	17.1	3	9.1	17	14.8	1.09	>0.05
Total	82	100.0	33	100.0	115	100.0		

This table illustrates that beaten girls had no sequelae of beating at higher percentage (87.9%) than boys (68.3%), while fractures occurred among boys at higher percentages (14.6%) than girls (3%). These differences were statistically significant (P<0.05).

Table (8):

Table (9): Distribution of the beaten students according to place of beating and type of school.

Place of beating	Public school		Private school		Total	
	No	%	No	%	No	%
Class	20	40.0	20	30.8	40	34.8
Playground	24	48.0	30	46.1	54	47.0
Way to school	6	12.0	15	23.1	21	18.2
Total	50	100.0	65	100.0	115	100.0

$X^2 = 2.61$ **$p > 0.05$**

This table demonstrates that the majority of public and private students (48% & 46.1% respectively) were beaten in the playground, followed by classroom (40% & 30.8% respectively) then the way to school (12% & 23.1% respectively), but these differences were statistically non significant (P>0.05).

Chart (6): Place of beating among victimized students.

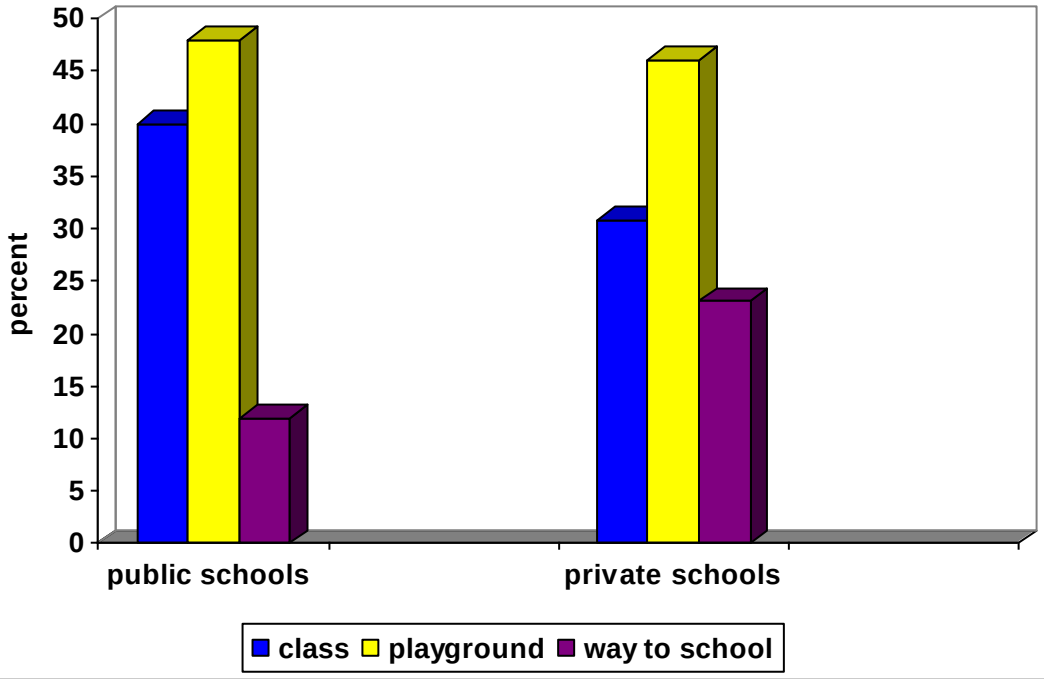


Table (10 a): Percentage of injured children among beaten students in both public and private schools.

Type of school / Injury	Public school		Private school		Total		Z	P
	No	%	No	%	No	%		
Injured	15	30.0	32	49.2	47	40.9	-2.08	<0.05
Not injured	35	70.0	33	50.8	68	59.1	2.08	<0.05
Total	50	100.0	65	100.0	115	100.0		

This table shows that about half (49.2%) of beaten private students were injured compared to less than one third (30%) of beaten students at public schools, this difference was statistically significant (P<0.05).

Table (10 b): Distribution of injured children according to place of treatment and type of school.

Type of school / Place of treatment	Public schools		Private schools		Total		Z	P
	No	%	No	%	No	%		
School	5	33.3	9	28.1	14	29.8	0.36	>0.05
Home	6	40.0	10	31.3	16	34.0	0.59	>0.05
Hospital	4	26.7	13	40.6	17	36.2	-0.93	>0.05
Total	**15**	100.0	32	100.0	47	100.0		

This table shows that the majority (40%) of injured students of public schools were treated at home, while the majority (40.6%) of injured students of private ones were treated at hospital, but these differences were not statistically significant (P>0.05).

Chart (7): Place of treatment after injury among beaten students.

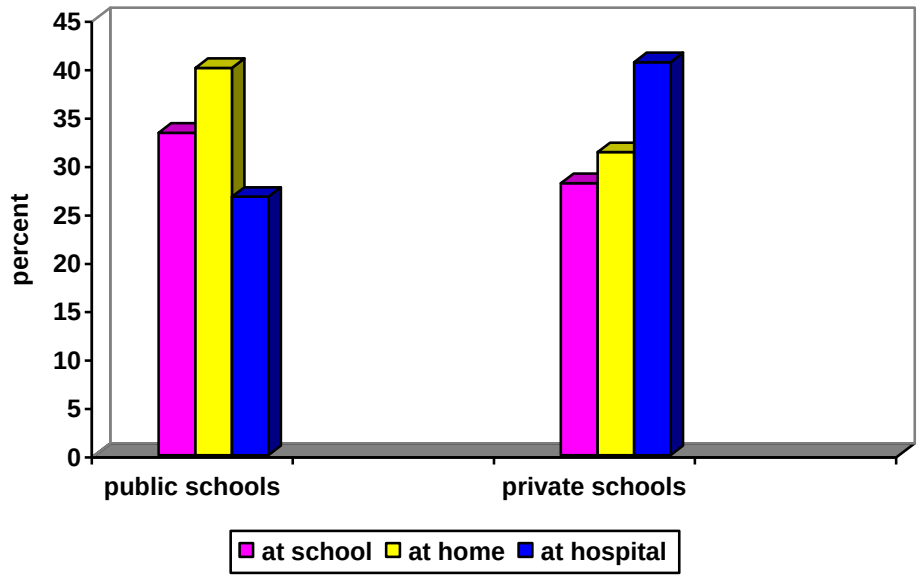


Table (11): Distribution of the students exposed to indirect verbal attacks according to gender and continuation of the attack.

Gender / Exposure to indirect verbal attack	Boys		Girls		Total		Z	P
	No	%	No	%	No	%		
Sometimes*	11	100.0	45	95.7	56	96.6	0.696	>0.05
Always**	0	0.0	2	4.3	2	3.4	-0.696	>0.05
Total	11	100.0	47	100.0	58	100.0		

*indicated by "2-3 times a month"
** indicated by "several times a week" ***(Glew et al, 2005)***

This table illustrates that there was no statistically significant difference (P>0.05) between boys and girls regarding frequency of exposure to indirect verbal attacks.

III- Impact of victimization on the studied students

Table (12): Distribution of the studied students according to victimization and scholastic achievement in the current academic year.

Victimization / Scholastic achievement	Not victimized		victimized		Total		Z	P
	No	%	No	%	No	%		
Bad	1	0.6	5	2.0	6	1.4	-1.14	>0.05
Good	15	9.1	50	19.6	65	15.5	-2.9	<0.01
Very good	26	15.8	54	21.2	80	19.0	-1.4	>0.05
Excellent	123	74.5	146	57.3	269	64.0	3.6	<0.001
Total	165	100.0	255	100.0	420	100.0		

This table shows that the percentage of non victimized students who achieved excellent was higher (74.5%) than that of victimized students (57.3%), this difference was statistically significant (P<0.001), while victimized students achieved bad, good and very good at higher percentages (2%, 19.6% & 21.2% respectively), these differences were statistically significant (P<0.01) for "good" scale only.

Chart (8): Scholastic achievement among victimized and not victimized students .

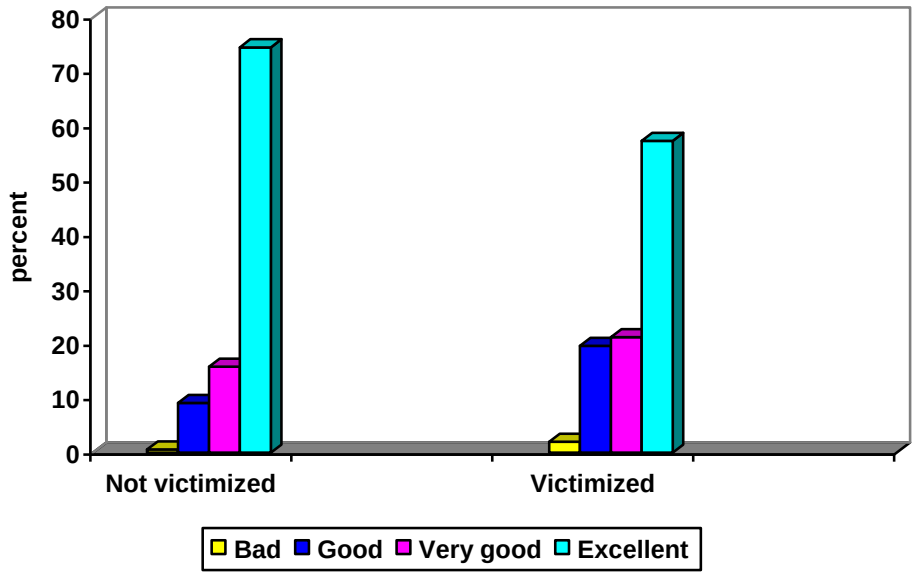


Table (13): Frequency distribution of the studied students according to victimization and student problems at school based on teacher's reports.

Based on Teacher's report about student problems at school, this table shows that the higher percentages of those who have emotional problems, problems in concentration and behavioral problems were included among victims in both public and private schools. These differences were statistically significant (P<0.001) in private schools, while in public schools, it was statistically significant (P<0.001) for problems in concentration only.

Table (14): Frequency distribution of the studied students according to victimization and student problems at home based on parents reports.

Based on parents' report about student problems at home, this table demonstrates that most of those who had emotional problems, problems in concentration and behavioral problems were victims in both public and private schools. These differences were statistically significant ($P<0.001$) in private schools, while in public schools, it was statistically significant ($P<0.05$) for emotional problems and problems in concentration only.

IV-Witnessing violence at school in the current academic year.

Table(15): Distribution of the studied students according to witnessing a colleague beaten at school and type of school.

Frequency of witnessing	Public school		Private school		Total		Z	P
	No	%	No	%	No	%		
No	30	15.0	67	30.5	97	23.1	-3.7	<0.001
Sometimes	152	76.0	138	62.7	290	69.0	2.94	<0.01
Always	18	9.0	15	6.8	33	7.9	0.83	>0.05
Total	200	100.0	220	100.0	420	100.0		

This table shows the frequency of witnessing a colleague beaten at school, the percentage of public school students who reported "sometimes" was higher (76%) than that of private school students (62.7%). These differences were statistically significant (P<0.01).

Table (16a): Distribution of the students who witnessed beats according to place of beating and type of school.

School / Place of witnessed beats	Public school		Private school		Total	
	No	%	No	%	No	%
Class	62	36.5	45	29.4	107	33.1
Playground	70	41.2	77	50.3	147	45.5
Both	8	4.7	16	10.5	24	7.5
Way to school	30	17.6	15	9.8	45	13.9
Total	170	100.0	153	100.0	323	100.0

X^2 =9.83 **P<0.05**

This table shows that the commonest place of witnessed beats was playground in both public and private schools (41.2% & 50.3% respectively), followed by classroom (36.5% for public & 29.4% for private schools). These differences were statistically significant (P<0.05).

Chart (9): Place of witnessed beats.

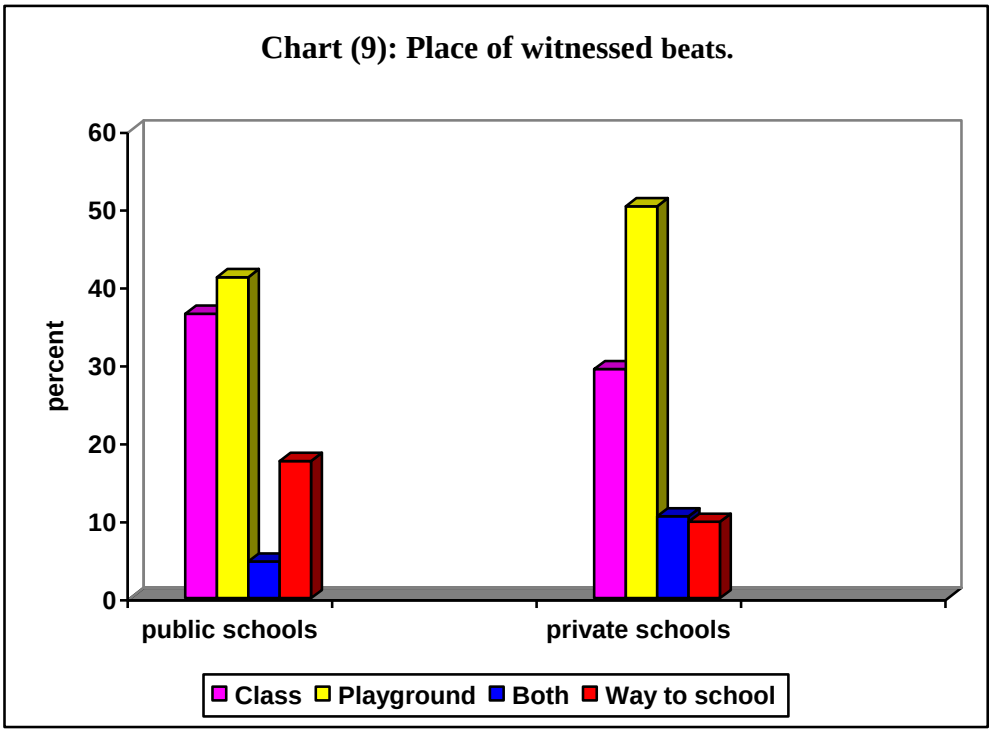


Table (16b): Distribution of the students who witnessed beats according to type of school and types of beats.

School / Types of witnessed beats	Public school		Private school		Total	
	No	%	No	%	No	%
Kick	46	27.1	46	30.1	92	28.5
Box	21	12.4	19	12.4	40	12.4
Pulling clothes	45	26.5	31	20.3	76	23.5
Slap	26	15.2	19	12.4	45	13.9
Mix *	32	18.8	38	24.8	70	21.7
Total	170	100.0	153	100.0	323	100.0

X^2 =3.39 **P > 0.05**

Mix* = more than one type of beats

This table illustrates that the most common type of witnessed beats was "kick" in both public and private schools (27.1% & 30.1% respectively), followed by pulling clothes (26.5%) in public schools and the "mix" type in private schools (24.8%), but these differences were statistically insignificant (P>0.05).

V- Inducing violence by students at school in the current academic year .

Table (17): Distribution of the studied students according to gender and their role to induce violence.

Chart (10):Frequency distribution of studied students according to gender and being perpetrators .

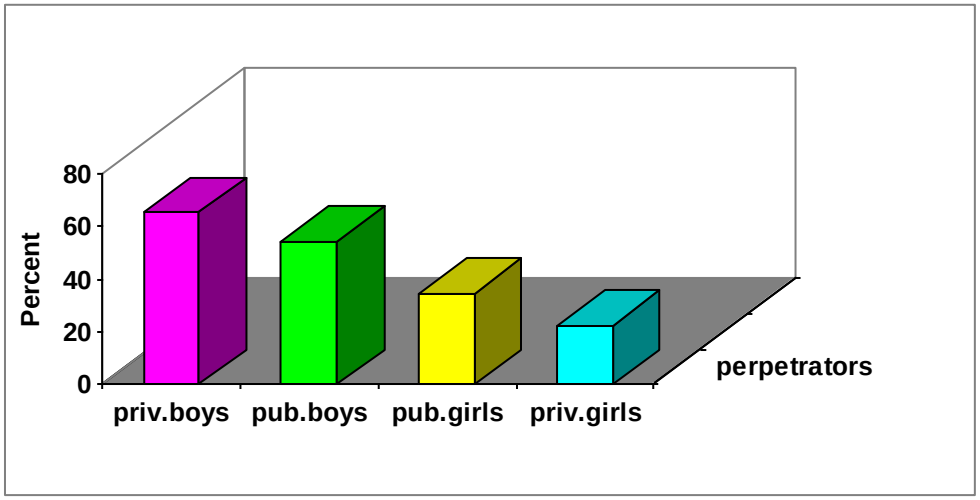


Table (18): Distribution of the studied students according to gender and frequency of each form of violence induced by students.

Gender / Forms of violent acts induced by students	Boys N=219		Girls N=201		Total N=420		Z	P
	No	%	No	%	No	%		
Beat								
No*	107	48.9	171	85.1	278	66.1	-7.84	<0.001
Infrequent **	102	46.5	28	13.9	130	31.0	7.23	<0.001
Frequent ***	10	4.6	2	1.0	12	2.9	2.2	<0.05
Steal								
No	201	91.8	191	95.0	392	93.3	-1.3	>0.05
Infrequent	16	7.3	9	4.5	25	6.0	1.22	>0.05
Frequent	2	0.9	1	0.5	3	0.7	0.51	>0.05
Direct verbal								
No	155	70.8	167	83.0	322	76.7	2.97	<0.01
Infrequent	32	14.6	18	9.0	50	11.9	1.79	<0.05
Frequent	32	14.6	16	8.0	48	11.4	2.14	<0.05
Indirect verbal								
No	209	95.4	188	93.5	397	94.5	0.86	>0.05
Infrequent	9	4.1	9	4.5	18	4.3	-0.17	>0.05
Frequent	1	0.5	4	2.0	5	1.2	-1.45	>0.05
Spit								
No	186	84.9	198	98.5	384	91.4	-4.97	<0.001
Infrequent	21	9.6	3	1.5	24	5.7	3.57	<0.001
Frequent	12	5.5	0	0.0	12	2.9	3.37	<0.001

* indicated by never
** indicated by sometimes
indicated by almost every day ***(Singer and Flannery, 2000).

This table demonstrates that boys induced beating, direct verbal violence and spitting at higher percentages than girls, these differences were statistically significant (P<0.05). On the other hand, girls induced indirect verbal violence at higher percentages than boys but these differences were statistically non significant (P>0.05).

Table (19a): Distribution of the studied students according to carrying knife at school and type of school.

Carrying knife	Public school		Private school		Total		Z	P
	No	%	No	%	No	%		
Yes	19	9.5	10	4.5	29	6.9	2	**<0.05**
No	181	90.5	210	95.5	391	93.1	-2	**<0.05**
Total	200	100.0	220	100.0	420	100.0		

This table shows that public school students carried knife at higher percentage (9.5%) than private school students (4.5%), this difference was statistically significant (P<0.05).

Table (19b): Distribution of the studied students according to witnessing someone carry knife at school and type of school.

Witnessing someone carry knife	Public school		Private school		Total	
	No	%	No	%	No	%
Yes	84	42.0	77	35.0	161	38.3
No	116	58.0	143	65.0	259	61.7
Total	200	100.0	220	100.0	420	100.0

X^2 = 2.17 **P>0.05**

This table demonstrates that there was no statistically significant difference (P>0.05) between public and private schools regarding witnessing someone carry knife at school.

Chart (11 a): Frequency of carrying knife at school.

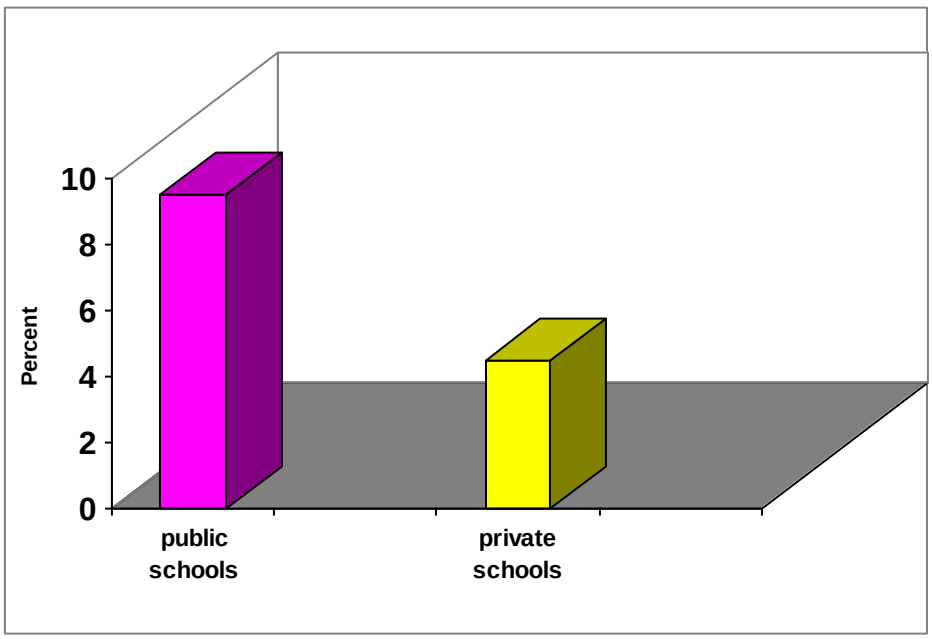


Chart (11 b): Frequency of witnessing someone carry knife at school.

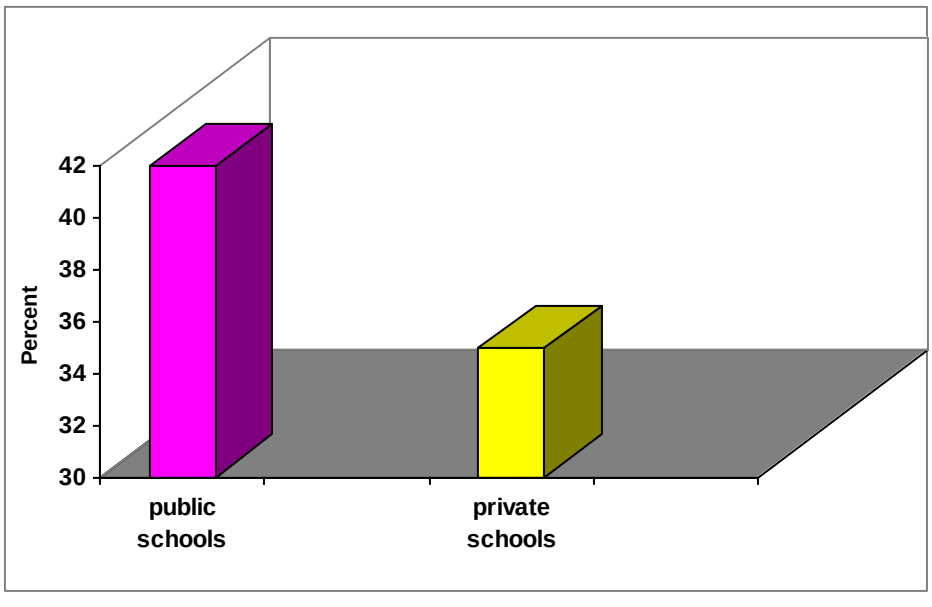


Table (20):

Chart (12 a): Inducing violence according to gender in public schools.

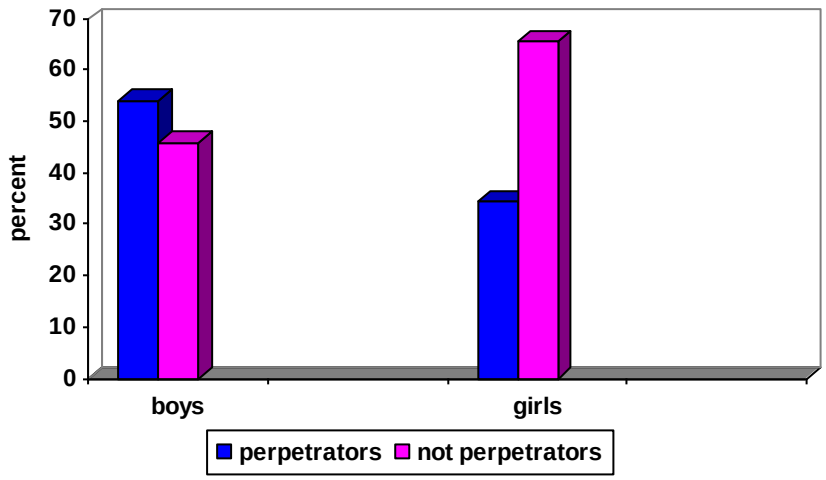


Chart (12 b): Inducing violence according to gender in private schools.

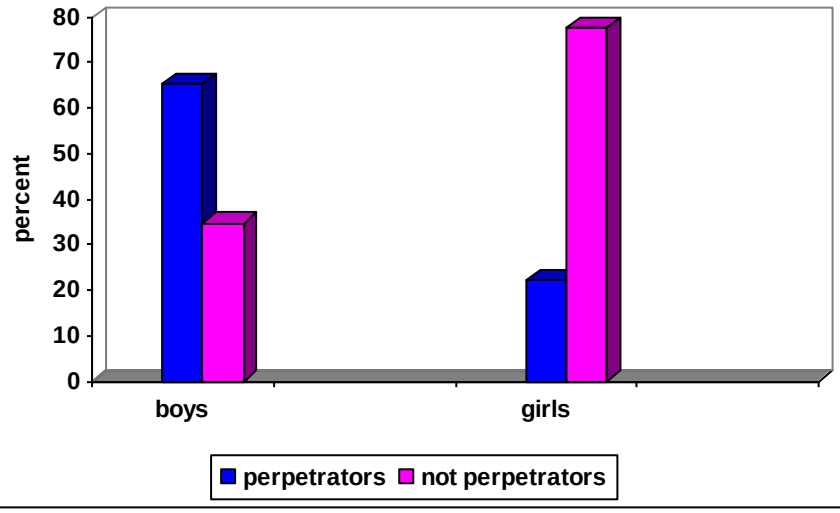


Table (21):

Table (22):

Table (23):

Table (24):

Table (25):

Table (26): Distribution of the studied students according to being perpetrators and playing video games.

Playing video games	Public school N=200				Private school N=220			
	Perpetrator N=88		Not perpetrators N=112		Perpetrator N=101		Not perpetrators N=119	
	No	%	No	%	No	%	No	%
No	18	41.9	25	58.1	4	28.6	10	71.4
Yes	70	44.6	87	55.4	97	47.1	109	52.9
X^2	0.102				1.81			
P	>0.05				>0.05			

This table demonstrates that about half of video game players in both public and private schools (44.6% and 47.1% respectively) were perpetrators of violence but these results were not statistically significant (P>0.05) in both schools.

Table (27):

Table (28):

VII- Studying students according to SDQ*questionnaire:

Table (29): Distribution of the studied students according to reporting violent act and SDQ total score based on teacher's report.

SDQ score (teacher) / Violent act	Public school N=200						Private school N=220					
	Normal		Borderline		Abnormal		Normal		Borderline		Abnormal	
	No	%	No	%	No	%	No	%	No	%	No	%
Neither	29	24.4	5	19.3	24	43.6	49	34.5	9	30.0	24	50.0
Victim	32	26.9	9	34.6	13	23.6	28	19.7	5	16.7	4	8.3
Perpetrator	11	9.2	3	11.5	2	3.6	7	4.9	1	3.3	2	4.2
Both(victim&perpetrator)	47	39.5	9	34.6	16	29.2	58	40.9	15	50.0	18	37.5
Total	119	100	26	100	55	100	142	100	30	100	48	100
X^2	9.68						6.45					
P	>0.05						>0.05					

*** SDQ→ Strength & difficulty Questionnaire** a brief behavioral screening questionnaire

Based on teacher's report of SDQ questionnaire, this table illustrates that about one third (34.6%) of borderline students in public schools are victims and another one third (34.6%)of them are both victims and perpetrators, but this difference is not statistically significant (P>0.05). In private schools, 50% of the borderline students and more than one third (37.5%) of the abnormal students were both victims and perpetrators, this difference was also statistically non significant (P>0.05).

Table (30): Distribution of the studied students according to reporting violent act and SDQ total score based on parents' report.

SDQ score (parents) / Violent act	Public school N=200						Private school N=220					
	Normal		Borderline		Abnormal		Normal		Borderline		Abnormal	
	No	%	No	%	No	%	No	%	No	%	No	%
Neither	37	29.6	2	8.0	19	38.0	42	30.9	16	43.3	24	51.1
Victim	36	28.8	8	32.0	10	20.0	29	21.3	5	13.5	3	6.4
Perpetrator	6	4.8	5	20.0	5	10.0	6	4.4	2	5.4	2	4.2
Both(victim&perpetrator)	46	36.8	10	40.0	16	32.0	59	43.4	14	37.8	18	38.3
Total	125	100	25	100	50	100	136	100	37	100	47	100
X^2	13.2						9.59					
P	<0.05						>0.05					

Based of parents' report of SDQ questionnaire, this table shows that the majority of borderline students at public schools (40%) and about one third (32%) of the abnormal students were both victims and perpetrators of violence, this difference was statistically significant (P<0.05). In private schools, more than one third of borderline and abnormal students (37.8% and 38.3% respectively) were both victims and perpetrators of school violence, but this difference was statistically non significant (P>0.05).

Table (31): Distribution of the studied students according to SDQ total score based on parents report and that based on teacher's report.

SDQ score (teacher)	SDQ score (parents)											
	Public school N=200						Private school N=220					
	Normal N=125		Borderline N=25		Abnormal N=50		Normal N=136		Borderline N=37		Abnormal N=47	
	No	%	No	%	No	%	No	%	No	%	No	%
Normal	112	89.6	3	12.0	4	8.0	128	94.1	14	37.8	0	0.0
Borderline	3	2.4	22	88.0	1	2.0	5	3.7	21	56.8	4	8.5
Abnormal	10	8.0	0	0.0	45	90.0	3	2.2	2	5.4	43	91.5
Kappa test significance	P<0.001						P<0.001					

This table shows that there was an agreement between parents and teachers regarding the three categories (normal (89.6%), borderline (88%) and abnormal (90%)) in public schools. In private schools, the agreement was for the normal and the abnormal categories mainly (94.1% & 91.5% respectively). These statistical differences were highly significant (P<0.001) in both schools.

Table (32): Correlation between SDQ total score of parents and that of teacher among the studied students in both public and private schools.

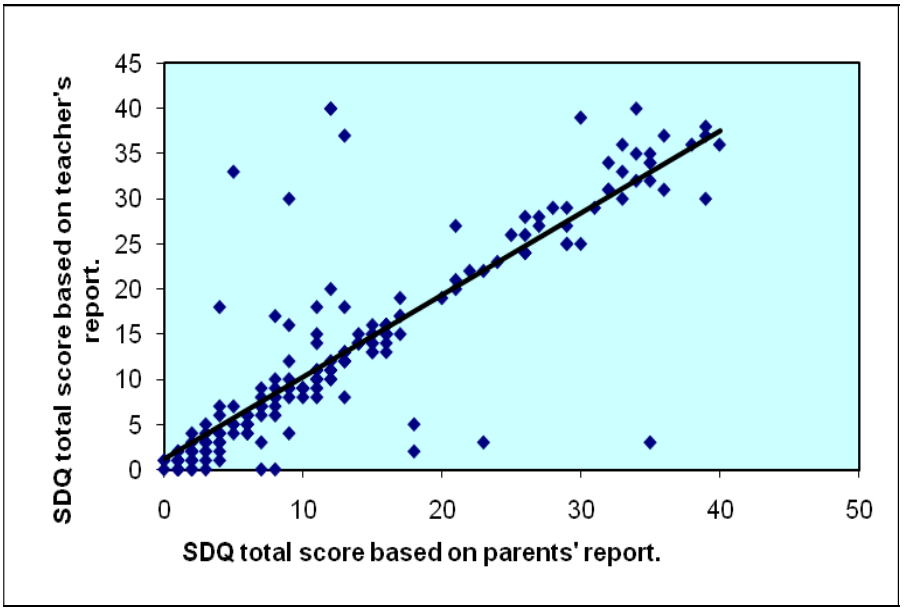
	r (for SDQ total score of parents and that of teacher)	**P**
Public school	0.86**	0.000
Private school	0.94**	0.000

**** Correlation is significant at the 0.01 level (2-tailed).**

This table illustrates that there was a positive correlation between the SDQ total score of parents and that of teacher i.e as the parents' score increased, the teacher's score increased too in both public and private schools (P<0.01).

Chart (13) : Correlation between SDQ total score of parents and that of teacher among studied students.

a) Public schools :



b) Private schools

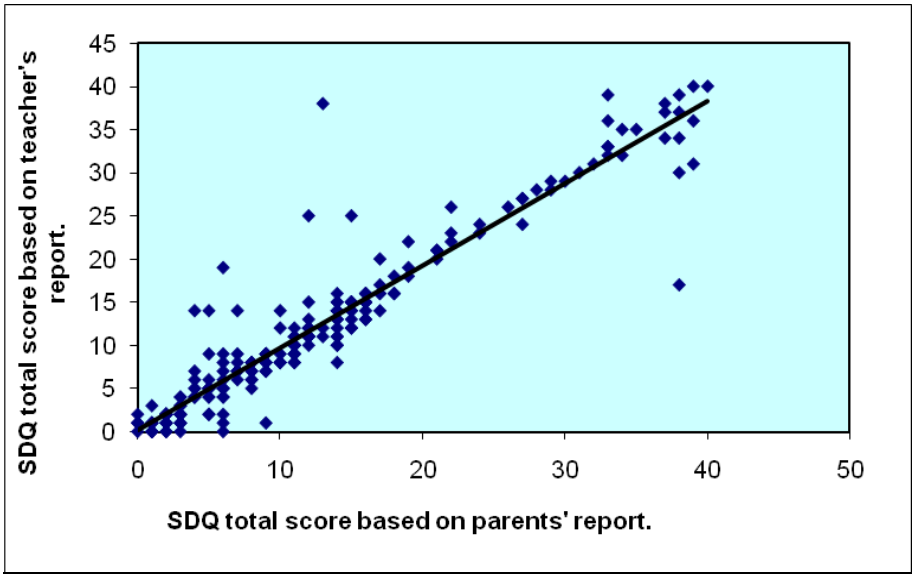


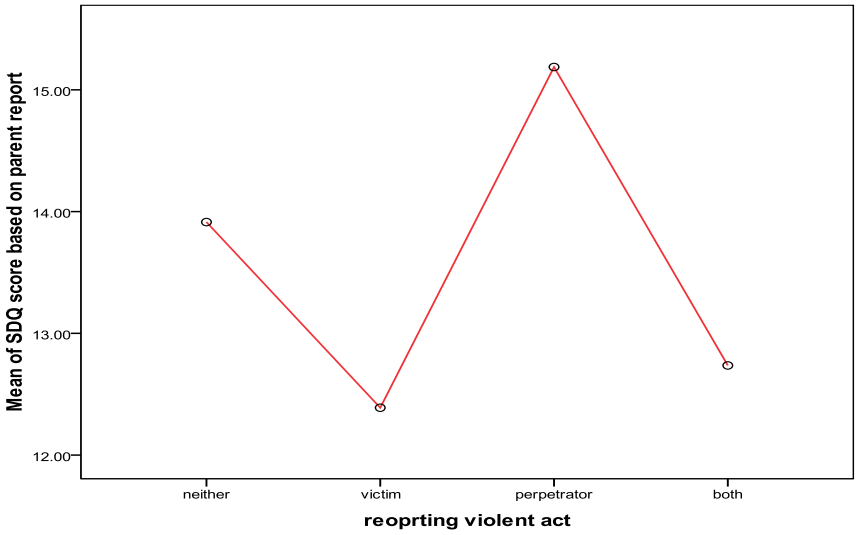
Table (33 a): Mean & SD of SDQ total score among studied students in public schools according to reporting violent act.

SDQ score / Reporting violence	Parents' total SDQ score			Teacher's total SDQ score		
	Mean ± SD	(95%CI) of mean	"F"& P	Mean ± SD	(95%CI) of mean	"F"& P
Neither	13.9 ± 11.4	(10.9-16.9)		15.9 ± 12.7	(12.5-19.2)	
Victim	12.4 ± 9.6	(9.8-15)	"F"= 0.43 P > 0.05	12.3 ± 10.2	(9.5-15.1)	"F"= 1.7 P > 0.05
Perpetrators	15.2 ± 8.6	10.6-19.8)		11.1 ± 8.3	(6.7-15.6)	
Both(victim&perpetrator)	12.7 ± 10.8	(10.2-15.3)		12 ± 10.6	(9.6-14.5)	

Based on parents' report, this table shows that the highest mean of SDQ total score was among perpetrators of school violence (15.2 ± 8.6) but this difference was statistically non significant (P>0.05). Teacher's report showed that the highest mean was among the "Neither" group(15.9 ± 12.7). This difference also was statistically non significant(P>0.05).

Chart (14): Means plots of SDQ total score in public schools

a) Parents based score



b) Teacher based score

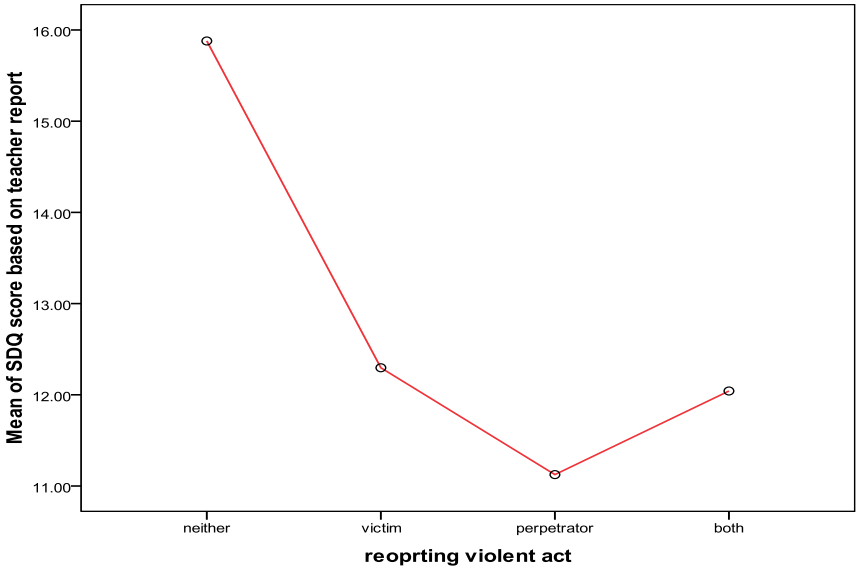


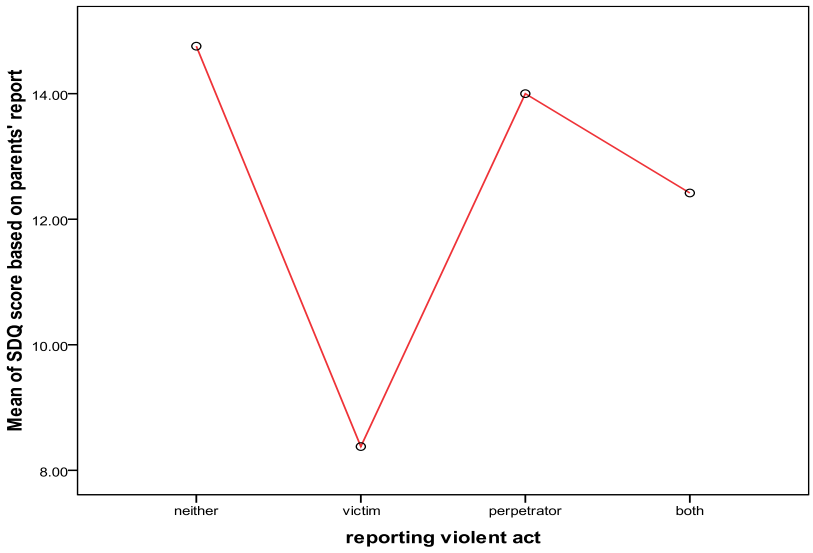
Table (33 b): Mean & SD of SDQ total score among studied students in private schools according to reporting violent act.

SDQ score / Reporting violence	Parents' total SDQ score			Teacher's total SDQ score		
	Mean ± SD	(95%CI) of mean	"F"& P	Mean ± SD	(95%CI) of mean	"F"& P
Neither	14.8 ± 11.0	(12.3-17.2)	3.6 < 0.05	13.9 ± 10.7	(11.5-16.3)	2.61 >0.05
Victim	8.4 ± 7.4	(5.9 -10.9)		8.4 ± 7.8	(5.8 - 10.9)	
Perpetrators	14 ± 11.2	(6.0 -21.9)		13.2 ± 11.7	(4.8 -21.6)	
Both(victim&perpetrator)	12.4 ± 9.5	(10.4-14.4)		12.4 ± 10.0	(10.3-14.5)	

Based on parents' and teacher's report, this table shows that the highest mean of SDQ total score was among students classified as "neither" (14.8 ± 11.0 & 13.9 ± 10.7) respectively. This difference was statistically significant (P<0.05) for parents' total score only.

Chart (15) : Means plots of SDQ total score in private schools

a) Parents based score



b) Teacher based score