Relationship between Exposure to Violence In The Cpmputer Games And Aggressive Behavior Among Early Adolescent Students

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ABSTRACT

Background*:** computer games have become one of the favorite activities of children. Although computer games are designed to be entertaining, challenging, and sometimes educational, most include violent content. Despite many reports that the exposure to violent computer games is a causal risk factor, the public remains largely unaware of these risks, and adolescents' exposure to violent computer games remains extremely high. ***Objectives: The goal of this study was to investigate the relationship between exposure to violence in the computer games and aggressive behavior among early adolescent students. ***Subjects and Method*:** The present study was carried out in six preparatory schools located in Port-Said City, which were randomly chosen representing the three zones of Port-Said Governorate. The subjects of the study comprised of 501 school students (287 were females and 214 were males), their age ranging from 12 to 15 years and recruited randomly from every educational grade at each randomly selected school, and their teachers of the Arabic subject, their number was 16 teachers. Five tools were utilized to collect the necessary data for this study. ***Results:*** the majority of the students played computer games. More than three quarters of them spent playing computer games from one to two hours on weekdays. On the other hand, slightly less than two thirds of the students played three hours or more on weekend. Almost three quarters of the studied students preferred to play computer games without violent content, compared to less than one third of them preferred playing games with violent content. There were statistically significant correlations between playing violent computer games and physical and verbal aggression as perceived by the studied students and their teachers. Finally, there were highly statistically significant correlations between parents control over computer game choices and students' physical and social aggression as perceived by their teachers. ***Conclusion:*** Playing computer games are popular leisure activities among early adolescents. The study revealed that, there was a statistically significant correlation between levels of physical and verbal aggression and exposure to violent computer games among early adolescents in Port-Said city.

Key words: violence, computer games, aggressive behavior, early adolescents.

INTRODUCTION

New interactive digital media have become an integral part of adolescents' lives. The number of adolescents using computer, internet and other forms of entertainment media has been increased tremendously *(Kaiser, 2003).* In Egypt, most adolescents now have access to computer at home; they are using them for everything from playing games to chatting with friends via e-mail to surfing the web *(Abd El-Fatah, 2009).* The increased level of interactivity now possible with computer games and with the communication features of the internet has heightened both the promise of greatly enriched learning and the concern related to increased risk of harm *(Wartella & Jennings, 2010; Hasan et al., 2013).*

Adolescence is a time of numerous physical, emotional, social, sexual and psychological transitions, which involves a cognitive maturity as well as the ability for abstract thoughts *(Carter et al., 2009; Mohr, 2009).* As children enter adolescence, many begin to engage in risky behaviors such as physical inactivity, smoking, alcohol use, sexual behaviors, and aggression that contribute to the leading causes of death and disability. As a result of the harmful effects of aggression on adolescents' development, it has been one of the most studied topics in recent decades *(Underwood et al., 2001; Möller et al., 2012; Ebesutani et al., 2014).*

Aggressive behavior is known to be related to a number of physiological, psychological, familial and cultural factors *(Novozhylova, 2001).* The specific pathways, through which aggressive behaviors are acquired however remain unclear. Social learning theory provides some insight into how exposure to violence can lead to aggressive behavior in adolescents. Based on observational learning (modeling) theory, exposure to violence provides an opportunity for the child to learn via modeling of aggressive acts. Moreover, after repeated exposure to violent and other inappropriate materials, children become desensitized and are more likely to engage in similar behaviors *(Pattreson, 2002; Shriner, 2002; Guerra et al., 2003; Cooley-Strickland et al., 2009).*

There is an evidence for a link between exposure to violent media and aggression. The evidence is based on experimental and correlation studies with different samples, including children, adolescents, and adults *(Gentile et al., 2004; Ostrov et al., 2006; Barlett et al., 2007; Wei, 2007).* Violent media content desensitizes the media user to both real-life violence and media violence, which in turn makes aggressive behavior

more likely, as users of violent media develop stable patterns of aggressive cognitions, emotions, and aggression attitudes over time. In addition to off line computer and games, the internet may be a new potential transport device for violent media contents such as violent movie clips and violent video games which include serious violent content towards other game characters (*Anderson & Bushman, 2002; Funk et al., 2004*). Although the association between media violence exposure and physical aggression has been studied, only a handful of studies have examined the association between exposure to media violence and other subtypes of aggression (*Gentile et al., 2011b*).

Significance of the study

New media has become an essential resource of education, communication and entertainment. Nonetheless, there are risks associated with children and adolescents' media use, these risks shouldn't inhibit its use but must attend to and manage. Aggressive behaviors in adolescents tend to be relatively stable across the life span and are associated with maladaptive functioning later in life. Due to the negative sequel associated with aggressive behaviors, it is of great important to identify the contributing factors and pathways leading to the acquisition of aggressive behaviors. Through better understanding the various leading factors and developmental pathways of aggression, it will be easily to identify and prevent the onset of aggressive acts in adolescents.

AIM OF STUDY:

The aim of this study was to investigate the relationship between exposure to violence in the computer games and aggressive behavior among early adolescent students.

SUBJECTS AND METHOD:

Research design:

A descriptive correlation research design was followed in this study.

Setting:

The study was conducted in six preparatory schools, representing the three zones of Port-Said Governorate. The three zones are: East, North, and South zone, from each zone two preparatory schools were randomly picked up, one school for boys and the other for girls.

Study subjects:

The study subjects comprised two main groups, the first one was preparatory school students of the previously mentioned schools, the sample consisted of 501 school students (287 were females and 214 were males). Students were recruited randomly from each school, to constitute the sample size and give the best representation of school students. They were included in the study based on the following criteria, willing to participate in the study, from both sexes, from every educational grade at the school, and aged between 12 to 15 years. The second one was the teacher of the Arabic subject for each selected class , because he / she is the one who gives the greatest number of lessons to the class, thus can observe and assess the students' behavior since they see the students more frequently. Their number was 16 teachers.

Tools of data collection:-

Tool 1: **Students' Socio-demographic Questionnaire:**

It was developed by the researcher. The questionnaire elicits socio-demographic data about the students' age, sex, birth order, number of siblings, and educational grade, questions about parents' level of education, occupation and income. It also included 6 questions that covered items related to habitual computer and internet usage such as duration of computer use, internet use, and purpose of internet usage.

Tool II: The Media Entertainment Questionnaire:

This questionnaire was developed by *Novozhylova (2001)* and revised by *Anderson et al. (2007),* to measure children's violent video games exposure. Assessment was based on students' self-reports of their favorite computer games.

Tool III: Physical and Verbal Aggressive Behavior Scale for Children:

This scale was developed by *Mansy and Hassan (1998).* It is an Egyptian Arabic scale. It consists of 72 items, each item should be answered by selecting one of the three alternatives, "Yes"= 2, "No"= 1, "Don't know" = 0. It is divided into two types of aggression; verbal aggression and physical aggression. The items are either positive or negative statements, the score is reversed in the negative statements, "Yes"= 1, "No"= 2, "Don't know" = 0.

Tool IV: Students' Social Aggressive Behavior Questionnaire:

This questionnaire was developed by *Paquette and Underwood (1999).* The social aggression questionnaire is consisted of 13 statements to assess how often the students perpetrated social aggression or tried to harm a peer's self-esteem or social

standing. Participants were instructed to respond on a scale by selecting one of the four alternatives, "Always"= 3, "Often"= 2 "Sometimes"= 1, "Never" = 0.

Tool V: Teacher Rating Scale for Aggression:

Teacher Rating Scale for Aggression was developed by *Galen and Underwood (1997)*, to assess the frequency of each student's aggressive behavior as observed by the teacher. The rating scale was consisted of 20 items that covered three subscales, physical aggression subscale (5 items), social aggression subscale (11 items), and verbal aggression subscale (4 items). Each answer of the participants was scored on a scale value from 0 to 3. "Always"= 3,"Often"= 2 "Sometimes"= 1"Never" = 0.

Content Validity:

It was ascertained by a Jury consisting of five experts in the field of Psychiatric and Pediatric Nursing. They were requested to express their opinions and comments on the translated tools (Tool II, IV&V). This phase was carried out in a period of two months.

Pilot Study:

The pilot study was carried out on 10% of the study subjects, which represented 50 students selected randomly from one of the randomly selected schools to test the tools before starting the data collection phase, and they were excluded from the entire sample of the research work. Purposes of the pilot study were to test the applicability of the study tools, and it served to estimate the time needed to complete the tools. It was conducted on 9 October 2012.

Method of Data Collection:

The actual study was conducted during the academic year 2012-2013 from 11 October 2012 to 31 March 2013, three days each week. Classes from each school were chosen randomly representing students from the three educational grades. The researcher met the students in their classrooms and explained to them the purpose of the study, how to complete the study tools and took their oral consent. Students were also informed about their right to refuse to participate in the study and that their answers will not be taken against them, it would be used for the purpose of the study only. The students filled in the tools using self-report technique that allow them to fill in their answers by themselves. The researcher was available for any questions from the students. Each student took about 60-90 minutes in filling the tools. Once all the children in each classroom completed the tools, corresponding teachers of Arabic language were given a list of participating students in their classes   and a

questionnaire (Tool V) about each one in his/her classroom. Teachers were asked to report how often each student engaged in physical, verbal, and social aggression, the questionnaire took no more than 10 minutes to complete for each student as teachers said.

Admnstrative design :

1- Before starting doing the steps in the study, an official letter was addressed from the Dean of the Faculty of Nursing to undersecretary of the Ministry of Education in Port-Said city, requesting his cooperation and permission to conduct the study, after explaining the aim of the study.

2- An official letters directed from the undersecretary of the Ministry of Education in Port-Said to the randomly selected schools to obtain their permission for conducting the study

Ethical Considerations:

1- School permission was taken to carry out the study.

2- Oral consent was obtained from the study subjects before participation in the study.

3- The aim of the study was explained to each participant to be familiar with the importance of his participation and assured them about the confidentiality of the obtained information.

4- Students were informed about their right to refuse to participate in the study or withdraw at any time.

Statistical design :

Scoring System:

Concerning Physical and Verbal Aggressive Behavior scale for Children (Tool III), responses were scored from 2 to 0. "Yes"= 2, "No"= 1, "Don't know" = 0. The score was reversed in the negative statements, "Yes"= 1, "No"= 2, "Don't know" = 0. As regard Students' Social Aggressive Behavior Questionnaire and Teacher Rating Scale for Aggression (Tool IV &V), items were scored 0, 1, 2, and 3 for the responses never, sometimes, often, and always, respectively. The scoring was reversed for negative items. For each type, the scores of the items were summed-up and the total score was divided by the number of the items, giving a mean score for the part. These scores were converted into a percent score. The level of aggression was considered to be high if the percent score was above 75%, and considered to be low if the percent score was equal or less than 75%.

RESULTS:

Table (1): illustrates the socio-demographic characteristics of the studied early adolescent students. The results reveales that students' age ranges between 12-15 years with a mean age of 13.7±1.0 years. It is also observed that more than half of the studied students (57.3%) are female, while the rest of them (42.7%) are males. As regard to school grade, more than one third of the studied students (38.1%) are in grade two. It can be noticed that slightly more than half of the students (51.1%) are the second or the third ranking order among their siblings, while 36.1% are the first ranking order among their siblings. Looking at their family size, two thirds of the studied students (66.7%) have five to six family members.

Table (2): reveals that the computer and internet use as reported by the studied early adolescent students. It is clear from the table that more than two thirds of the studied students (71.5%) have a computer at their homes, and about one third of them mentioned that they have a computer since two to less than three years, whereas 21.5% of them have it since one year.   Regarding internet use, almost three quarters of the students (73.1%) use internet compared to 26.9% didn't use it. Two thirds of the students (66.1%) use internet at home, while students who use it at friends' homes and net café constituted 21.9% and 10.1% respectively. The table also shows that, more than half of the studied students (58.4%) use internet alone, whereas only 19.7% of them reported that they use it with their parents. Concerning the purpose of using internet, the majority of the students (82.2%) use it to seek information, followed by playing games, watching movies, and chatting which constituted 73.5%, 64.5%,and 56.6% respectively.

Table (3): presents electronic games playing habits as reported by the studied early adolescent students.   The results reveal that, the majority of the students (87.2%) mentioned that they play computer games.   More than three quarters of them, (79.2%) spend playing computer games from one to two hours on weekdays, compared to 20.8% of them played three hours or more.   On the other hand, looking at the amount of time students spent playing computer games on weekend, slightly less than two thirds of the students (62.2%) play three hours or more, compared to only 37.8% of them spend one to two hours playing computer games on weekend. It is clear from the table that, almost three quarters of the studied students (73.0%) prefer to play computer games without violent content, compared to 27.0% of them preferred playing games with violent content.   In relation to the favorite computer

games playing, more than two thirds of the students (68.1%) report that classic adventure games are the most favorite games for them, followed by construction strategy games (62.2%).   Less than half of the students (41.4%) reports that action adventure games were the most favorite games for them, followed by sport games (36.8%), and shooter games (27.0%).

Table (4): illustrates physical, verbal, and social aggression among the studied early adolescent students as perceived by the students and their teachers. It is clear from the table that, nearly one third of the studied students (31.7%) have high level of social aggression, compared to 27.9% of the students have high level of physical aggression. The table also reveals that, almost one quarter of the students (25.9%) have high level of verbal aggression.   In relation to teachers' rating of physical, verbal, and social aggression among early adolescent students, teachers report that high level of verbal aggression is observed among nearly one third of the students (32.3%), while 28.7% of the students have high level of physical aggression. Regarding social aggression, teachers report that only 17.8% of the studied students have high level of social aggression.

Table (5): shows the relationship between students' physical, verbal, and social aggression as perceived by the studied students and their teachers and their preference of playing violent video\ computer games. In relation to students' perception, the table shows that almost two thirds of the students who have high levels of physical, verbal, and social aggression (66.7%, 64.3%, and 65.9%) didn't prefer playing violent video\ computer games, compared to 33.3%, 35.7%, and 34.1% respectively who prefer playing violent video\ computer games. Statistically significant differences are found between students' who preferred playing of violent computer games, and those who didn't prefer in relation to levels of verbal and social aggression as perceived by the studied students where P= 0.01, and 0.03 respectively. The results depicts that levels of verbal and social aggression are significantly low among the students who didn't prefer playing violent computer games.   As regard teachers' perception, the results reveals that more than two thirds of the students who have high levels of physical, social and verbal aggression (67.7%, 75.6%, and 72.9%) didn't prefer playing of violent video\ computer games, compared to 32.3%, 24.4%, and 27.1% who prefer playing violent video\ computer games.

Table (6): reveals the correlation matrix of the scores of physical, verbal, and social aggression as perceived by the studied students and their teachers and students' socio-

demographic characteristics, playing violent computer games, and parents control over computer game choices.   The table shows that statistically significant correlations between students' age and physical & verbal aggression as perceived by the students, and social aggression as perceived by their teachers ("r"= 0.114, 0.135, and 0.144 respectively).   Statistically significant inverse correlations are   found between students' fathers' education and physical & verbal aggression as perceived by the students, and social & verbal aggression as perceived by teachers ("r"= - 0.104, - 0.091, - 0.116, and - 0.116 respectively). It can be noticed that, there are statistically significant correlations between Playing violent computer games and physical, and verbal aggression as perceived by the studied students and their teachers ("r" = .118, .185, .096, and .101). This means that playing violent computer games increases, the levels of physical and verbal aggression. Finally, there are   highly statistically significant correlations between parents control over computer game choices and students' physical and social aggression as perceived by their teachers ("r"= 0.138, and 0 .172 respectively).

Table (1): Socio - Demographic Characteristics of the Studied Early Adolescent Students.

Students' *socio-demographic characteristics*	Frequency (n=501)	Percent
Age (In years):		
12 -	50	10.0
13 -	185	36.9
14 -	139	27.7
15	127	25.4
Range	12 -15	
Mean ±SD	13.7±1.0	
Sex:		
Male	214	42.7
Female	287	57.3
School grade:		
1	168	33.5
2	191	38.1
3	142	28.4
Birth order:		
First	181	36.1
Second or third	256	51.1
Fourth or more	64	12.8
Range	1-7	
Family size:		
3-4	97	19.3
5-6	334	66.7
7+	70	14.0

Table (2): Computer and Internet Use as Reported by the Studied Early Adolescent Students.

Students' use of computer and internet	Frequency (n=501)	Percent
Had computer at home:		
Yes	358	71.5
No	143	28.5
Computer at home since (years):n=358	77	21.5
1	113	31.6
2- <3	87	24.3
3-5	81	22.6
>5		
Use internet:		
Yes	366	73.1
No	135	26.9
Use of internet at: (n=366) [@]		
Home	242	66.1
School	7	1.9
Net café	37	10.1
Friends	80	21.9
Use internet with:		
Nobody (alone)	214	58.4
Parents	72	19.7
Friends	80	21.9
Use internet with family:		
Yes	72	19.7
No	294	80.3
Use internet for: [@]		
Seeking information	301	82.2
Chatting	207	56.6
Hearing songs	225	61.5
Watching movies	236	64.5
Playing games	269	73.5

(@) Not mutually exclusive

Table (3): Electronic Games Playing Habits as Reported by the Studied Early Adolescent Students.

Students' electronic games playing habits	**Frequency (n=501)**	**Percent**
Play computer games:		
Yes	437	87.2
No	64	12.8
Time of games on weekdays (hours) n= 437:		
1-2	346	79.2
3+	91	20.8
Time of games on weekend (hours) n= 437:		
1-2	165	37.8
3+	272	62.2
Types of games:[@]		
Action adventure	181	41.4
Construction strategy	272	62.2
Classic adventure	298	68.1
Military strategy	91	20.8
Shooter games	118	27.0
A combination of shooter and racing games	46	10.5
Simulations	58	13.2
Sport games	161	36.8
Horror games	99	22.6
Prefer playing violent games (n=437):		
Yes	118	27.0
No	319	73.0
Parent(s) control over computer game choices:		
No	385	76.8
Sometimes	63	12.6
Yes	53	10.6

(@) Not mutually exclusive

Table (4*): Physical, Verbal, and Social Aggression among the Studied Early Adolescent Students as Perceived by the Students and their Teachers.*

Types and levels of aggression	Frequency (n=501)	Percent
Physical aggression:		
High	140	27.9
Low	361	72.1
Verbal aggression:		
High	130	25.9
Low	371	74.1
Social aggression:		
High	159	31.7
Low	342	68.3
Physical aggression (as perceived by teacher):		
	144	28.7
High	357	71.3
Low		
Social aggression (as perceived by teacher):		
	89	17.8
High	412	82.2
Low		
Verbal aggression (as perceived by teacher):		
	162	32.3
High	339	67.7
Low		

Table (5)*): Relationship between Students' Physical, Verbal and Social Aggression as Perceived by the Studied Early Adolescent Students and their Teachers and their Preference of Playing Violent Computer Games.

Types and levels of aggression	Prefer playing violent games				Total		X^2 test	P-value
	Yes (n= 118)		No (n= 319)					
	No	%	No	%	No	%		
Physical aggression:								
High	42	33.3	84	66.7	140	100	3.60	0.06
Low	76	24.4	235	75.6	361	100		
Verbal aggression:								
High	41	35.7	74	64.3	130	100	5.92	**0.01***
Low	77	23.9	245	76.1	371	100		
Social aggression:								
High	46	34.1	89	65.9	159	100	4.96	**0.03***
Low	72	23.8	230	76.2	342	100		
Physical aggression (teacher):								
High	43	32.3	90	67.7	144	100	2.75	0.10
Low	75	24.7	229	75.3	357	100		
Social aggression (teacher):								
High	19	24.4	59	75.6	89	100	0.34	0.56
Low	99	27.6	260	72.4	412	100		
Verbal aggression (teacher):								
High	38	27.1	102	72.9	162	100	0.00	0.96
Low	80	26.9	217	73.1	339	100		

(*) Statistically significant at p<0.05

Table (6*): Correlation Matrix of the Scores of Physical, Verbal, and Social Aggression and Students' Socio-demographic Characteristics, playing violent computer games, and parents control over computer game choices.**

Students' socio-demographic characteristics, media usage, and parental mediation	Spearman's correlation coefficient (r)					
	Scores of					
	Physical aggression	Verbal aggression	Social aggression	Physical aggression (as reported by teacher)	Social aggression (as reported by teacher)	Verbal aggression (as reported by teacher)
Age	.114*	.135**	0.07	-0.03	.144**	0.05
School grade	0.05	0.09	0.02	-0.02	.119**	-0.01
Birth order	0.03	0.01	0.02	0.05	0.03	0.05
Father's education	-.104*	-.091*	-0.06	-0.05	-.116**	-.116**
Mother's education	-0.07	-0.07	-0.03	-0.05	-.170**	-.107*
Playing violent computer games	.118*	.185**	0.07	.096*	0.08	.101*
Parents control over computer game choices	0.02	-0.03	-0.02	.138**	.172**	0.07

(*) Statistically significant at P<0.05   (**) Statistically significant at P<0.01

DISCUSSION:

Adolescents live in a media saturated world in which violent media are highly popular among them particularly among boys. The underlying motives invoked to explain the attraction to violent media in adolescence range from a heightened need for arousal and sensation during this period of development to social status concerns as the desire to appear brave and mature *(Slater, 2003; Kirsh, 2006; Olson, 2010).* New media offer a vast amount of useful products, including web pages tailored to the needs of adolescents, and educational games. At the same time, new media provide threatening content including web pages with age-inappropriate audiovisual material, violent video games, and unprotected chat rooms and discussion boards *(Funk, 2005; Donnerstein, 2009).*

The present study demonstrated high percentages of ownership and utilization of computer and internet among the early adolescent students. This may be because the internet offers access to virtually everything, including television shows, and movies,

no communicative uses such as information seeking, and gaming, as well as whole new forms of interactive communication such as chatting and instant messaging. This was congruent with the previous research studies that reported that adolescents are heavy users of newer electronic media *(Subrahmanyam & Greenfield, 2008; Möller & Krahé 2009).* Moreover, *Gnasigamoney & Sidhu (2013),* clarified that the internet can be considered as a great source of information provider for almost all ages specifically pre-adolescents and adolescents, and a virtual place for them to share ideas. Internet usage or access is not limited via a personal computer connection but it could be accessed by using a mobile phone.

Concerning electronic games playing habits, the study clarified that early adolescents were regular users of and computer games, as the results revealed that, the majority of the students spent much time in playing computer games. This result suggested that playing computer games are popular leisure activities among early adolescent, as well as, in line with *Lenhart et al. (2008); Rideout et al. (2010),* who mentioned that adolescent spent a substantial portion of the day engaging in various forms of media and found that more than three quarters of them play computer games on regular basis, children between the ages of seven and 17years play for an average of eight hours a week. The increasingly realistic and exciting nature of electronic games has helped to make them extremely popular with children and youth. Furthermore, *Hamid et al. (2010),* studied correlates of computer games playing among adolescents in an Islamic country and found that the majority of students who participated in the study played computer games.

One of the striking result of the present study was that, almost three quarters of the studied students preferred to play computer games contained no violent content, this result may have a relation to the results of the present study which found that, more than three quarters of the students reported that their parents did not control over their computer game choices, this finding was confirmed by a study conducted by *Vandewater et al. (2005),* who mentioned that harsh parental mediation of computer game choices predicted more violent game playing. Adolescents who are subject to harsh mediation may experience more angry emotions than adolescents who do not. These adolescents may use violent computer games as an outlet for these negative emotions.

In contradiction with the previous result, *Shim (2004),* who did a study to identify predictors of children's violent media use and revealed that parents' regulation of the

amount and content of playing computer games positively predicts children's violent game playing. In this regard, ***Nathanson (2002)*** found that parental mediation had little or no effect on adolescents' computer game use and aggression.

The results of the present study revealed statistical significant correlations between playing of violent computer games and physical and verbal aggression. This may be related to the violent computer games can teach aggressive attitudes, when gamers play many different types of violent games, repeat violent actions in a game over and over, it will result in more and more changes to the brain that make behaving that way more likely. This finding is confirmed by ***Huesmann & Kirwil (2007); Media Violence Commission, International Society for Research on Aggression (2012),*** who reported that playing violent video games increases the likelihood for aggressive behavior. Moreover, ***Gentile et al (2004); Barlett et al. (2007); Wei (2007),*** whom claimed that, there was a strong evidence for a link between the consumption of violent video games and aggression. Additionally, ***Carnagey & Anderson (2005)*** reported that, rewarding violent game actions increased hostile emotion, aggressive thinking and behavior. Furthermore, ***Qian et al. (2013b),*** stated that, the more time playing violent media the equaled more aggression.

This result was in contrast with the study of **Scharrer & Leone (2008),** who did a survey of 12-13 year olds and found that adolescents tend to see themselves as the least susceptible to the negative outcomes associated with playing of violent video games, as compared with the same age and younger peers. Moreover, ***Funk et al. (2002)*** mentioned that, aggression was found to be unrelated to playing violent video/computer games. Furthermore, ***Lenhart et al. (2008)*** reported that the majority of parents said that playing violent computer games had no effect on their children. Additionally, ***Ferguson et al. (2012),*** conducted a longitudinal study following 165 boys and girls aged10 to 14 years over 3 years, found that there was no long-term link between violent computer or videogames and adolescent aggression.

In this regard, ***Khoury (2012),*** found that, exposure to violence in the computer or video games and other entertainment media significantly influenced aggressive behaviors among children and adolescents. Furthermore, ***Anderson & Dill (2000),*** found that associations between violent computer game play and aggressive behavior were stronger for those who were characteristically aggressive. This interaction of violent content with trait hostility is important because it suggests that the harmful effects of playing violent games may be even greater for children who were already at

higher risk for aggressive behavior.

CONCLUSION:

Based on the findings of the current study, it can be concluded that:

Playing computer games were popular leisure activities among early adolescents. The study revealed that, there was a statistically significant correlation between levels of physical and verbal aggression and exposure to violent video games among early adolescents in Port-Said city.

RECOMMENDATIONS:

Based on the findings of the present study, the following recommendations are suggested:

1. Media awareness classes should be conducted for parents and their children to become more aware of the negative impact of violent media as it promotes aggressive attitudes, antisocial behavior, fear and desensitization.

2. In-service training program should be indicated to:-

a. School students to teach them problem-solving skills, assertiveness skills, anger management and new coping skills to enable them to manage angry or aggressive impulses in a constructive way.

b. Parents to become more involved with their children's play of computer games, they should provide more supervision over their children's time spent playing games.

3. Accurate monitoring of the nature, extent, and context of violence in all forms of media and implement appropriate guidelines and standards, and ensure that education in media awareness is a priority and a part of the school curricula.

4. School officials should be instructed to increase students' participation in social and recreational activities in schools where students are well supervised to promote socialization and expression of feelings.

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محمود عبد الحليم حامد منسي /محمد بيومي حسن: قائمة لقياس السلوك العدواني لدى الأطفال، بحث في الأساليب السوية والغير السوية في المعاملة الوالدية وعلاقتها بالسلوك العدواني بين تلاميذ الحلقة الأولى من التعليم الأساسي بالإسكندرية، كلية التربية-جامعة الإسكندرية. ص: 102-19.

الـعلاقـة بين التعرض للـعنف في ألعاب الكمبيوتر والسلوك العدواني
بيـن الطـلاب في مرحلـة المراهقـة المبكرة

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الخلاصه

يتجه الكثير من المراهقين إلى استخدام وسائل الإعلام الترفيهية مثل ممارسة ألعاب الكمبيوتر والإنترنت، ولكن الكثير من هذه الألعاب الإلكترونية يحتوي على مشاهد العنف والعدوان، والتي يمكن أن تُشكل تهديداً خطيرا على سلامة أفكار ومشاعر وسلوك الأطفال والمراهقون. لذلك أجريت هذه الدراسة بهدف اكتشاف العلاقة بين التعرض للعنف في ألعاب الكمبيوتر والسلوك العدواني بين الطلاب في مرحلة المراهقة المبكرة. وقد اشتملت عينة الدراسة على **501** طالباً منهم **287** من الإناث و214 من الذكور، تم اختيارهم عشوائياً من ست مدارس إعدادية مثلت المناطق التعليمية الثلاث في محافظة بورسعيد، كما اشتملت عينة الدراسة على مدرسي مادة اللغة العربية للفصول التي تم اختيارها، وقد كان عددهم **16** مدرساً ومدرسةً. وتم جمع البيانات الخاصة بالدراسة باستخدام خمس استمارات. وقد أسفرت النتائج الخاصة بهذه الدراسة عن أن هناك علاقات ذات دلالات إحصائية بين ممارسة ألعاب الكمبيوتر المحتوية على مشاهد العنف وبين السلوك العدواني الجسدي واللفظي بين الطلاب في مرحلة المراهقة المبكرة. وقد أوصت الدراسة بضرورة عمل ندوات توعية إعلامية للمراهقين وآبائهم حتى يكونوا على دراية بالتأثير السلبي لما يُبث من مشاهد عنف في وسائل الإعلام الترفيهية المختلفة على تطور السلوك العدواني، كما يجب على الآباء مشاركة الأبناء في ممارسة ألعاب الكمبيوتر المختلفة ومناقشتهم فيها، ويجب عليهم أيضاً تقليل ساعات ممارسة أبنائهم المراهقين للألعاب الإلكترونية.