

Psycho-Social Influence of Multimedia Violence amongst Children of School Age in Ile-Ife, Nigeria

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Abstract

The study established the influence of psycho-social influence of multimedia violence on children of school age in Ile-Ife, Nigeria. A total of 150 school age children involved in the study were randomly selected from four different schools constituted the sample for the study. Two validated instruments used for the study were author-constructed questionnaires with 0.71 and 0.76 reliability co-efficient respectively. The findings showed that 3.3% of the children were within the age 8-10 years, 3.3% were within the age 10-12 years, and 93.3% of the respondents within 13-15, 56.7% of the respondents were male while 43.3% were female. 73.3% of the students live in town with their parent while 26.7% live in staff quarters, 73.3% of the respondents spent an hour or less per day watching television. It further showed that 20.0% spent between 2 and 3 hours while 6.7% spent 7 hours and above watching television. The findings also showed that 26.7% have seen someone carrying a gun, 56.7% have had about someone getting killed, 36.6% have seen people bullied, 56.7% have seen people steal, 23.3% have seen people strangling their necks in fights, 60.0% have seen people punching each other, 50.0% have seen people smoking, 50.0% have seen people taking alcohol and drugs. On the other hand 36.7% of the respondent who have seen someone carrying a gun are always very upset, 56.7% of the respondent who have had about someone getting killed are very upset, 50.0% of the respondent who have seen people bullied are very upset, 36.7% of the respondent who have seen people steal are very upset. Whereas, 40.0% of the respondent who have seen people strangling their necks in fights are very upset, 36.6% of the respondent who have seen people punching each other are very upset, 40.0% of the respondent who have seen people smoking are very upset while 40.0% of the respondent have seen people taking alcohol and drugs are very upset. Based on the results of this finding, it was concluded that all the variables tested had contributed positively to the occurrence of the problem; therefore, psychologists, counsellors and educators should take cognizance of those variables that have been found to influence multimedia violence among school age children. The study recommended intervention strategy to help families, couples and the individuals for modifying attitudes and behaviour of the children on the inherent danger on multimedia violence.

Keywords: Psycho-social factors; Multimedia; Violence; School age children; Ile-Ife; Nigeria

Introduction

Background of the study

A large proportion of children's media exposure includes acts of violence that are witnessed or "virtually perpetrated" (in form of video games) by children and adolescents. By 18 years of age, the average young person will have viewed an estimated 200000 acts of violence on television alone [1]. The national television violence study evaluated almost 10000 hours of broadcast programming from 1995 through 1997 and revealed that 61% of the programming portrayed interpersonal violence, much of it in an entertaining or glamorized manner.

Violence on Television is the most commonly experienced exposure to violence in the lives of most children. While it is common knowledge that there is a great deal of violence on television, it is important to bear in mind that there are many different kinds of violence on television. For example, some shows feature of human actors, acting out brutally violent acts, such as murder, rape, and torture. While these may not be intended for young children, the

reality is that many such children have access to them. At the other extreme, even cartoons usually portray at least some violence. Often this is extreme violence, such as pianos dropping on heads. However, the characters usually do not bleed or die, and they are in any event clearly fictional, so one might expect that the impact is not as great as graphic violence with human actors.

American Academy of Pediatrics [2] (AAP), observed that "Children are influenced by media—they learn by observing, imitating, and making behaviours of their own". The influence of media on children has been the subject of increased attention among parents, educators, and health care professionals. The significance of this issue becomes obvious when one notes the diversity of Americans who share this concern. Included in this group of concerned citizens are those, most notably politicians, who typically stand in opposition to one another on many issues, but who stand together in agreement on this one.

Review of Literature

Factors influencing multimedia violence

Television viewing has the potential to generate both positive and negative effects, and many studies have looked at the impact of

television on society, particularly on children and adolescents [3]. An individual child's development level is a critical factor in determining whether the medium will have positive or negative effects. Not all television programs are bad, but data showing the negative effects of exposure to violence, inappropriate sexuality and offensive language are convincing [4].

Television can be a powerful influence in developing value systems and sharing behaviours. Unfortunately, much of today's television programming is violent. Hundreds of studies of the effects of television violence on children and teenagers have found that children may become "immune" or numb to the horror of the violence, gradually accept violence as a way to solve problems, imitate the violence they observe on television and identify with certain characteristics, victims, and or victimizers [5].

Television viewing frequently limits children's time for vital activities such as playing, reading, learning to talk, spending time with peers and family, participating in regular exercises, and developing other necessary physical, mental, and social skills [6]. In addition to the amount of time spent in front of the television, other factors that influence the medium's effects on children include the developmental level, individual susceptibility and children watch television alone or with their parents. Watching television takes time away from reading and schoolwork. More recent and well controlled studies show that even 1 to 2 hours of daily unsupervised television viewing by school-aged children has a significant deleterious effect on academic performance, especially reading [7]. Because television takes time away from play and activities, children who watch a lot of television are less physically fit and more likely to eat high fat and high energy snack food [6]. Television viewing makes a substantial contribution to obesity because prime time commercials promote unhealthy dietary practices [8].

Extensive viewing of television by children causes greater aggressiveness. Sometimes, watching a single violent program can increase aggressiveness. Children who view shows in which violence is very realistic, frequently are more likely to imitate what they see. Children with emotional, behavioural, learning, or impulse control problems may be more easily influenced by television violence. The impact of television violence may be immediately evident in the child's behaviour or may surface year's later [5]. A significant relationship between media violence and violence in the society is complicated by the fact that children are typically exposed to many stimuli as they grow up, some of which could play a role in their later behaviour. During the child's life, we cannot discount the role of such things as violent video games, the social values of parents and peers or general living conditions.

Psycho-social Effects of Media Violence

Studies have shown that people who watch lot of television violence not only behave more aggressively, but also are more prone to hold attitudes that favour violence and aggression as ways of solving conflicts. These viewers also tend to be less trusting of people and more prone to see the world as a hostile place, and also that media violence has desensitizing effects on viewers. Media violence other negative effects, including loss of empathy for victims, anesthetization to violence, identification with either victims or perpetrators, and acceptance of aggression and violence as viable ways to solve problems [9]. Today, television has become a leading sex educator in Canada. Between 1976 and 1996, there has been a 270% increase in sexual

interactions during the family of 2000 hours to 2100 hours [10]. Television exposes children to adult sexual behaviour in way that portray these actions as normal and risk-free, sending the message that because these behaviours are frequent, 'everybody does it'. Sex between unmarried partners is shown 24 times more often than sex between spouses [4]. While sexually transmitted infections and unwanted pregnancy are rarely mentioned.

Teens rank the media as the leading source of information about sex, second only to school sex education programs. Numerous studies document adolescents' susceptibility to the media's influence on their sexual attitudes, values, and beliefs. Music videos may have a significant behavioural impact by desensitizing viewers to violence and making teenagers more likely to approve of premarital sex [4]. Up to 75% of videos contain sexually explicit material, and more than half contain violence that is often committed against women. Women are portrayed frequently in a condescending manner that affects children's attitude about sex roles.

Attractive role models are aggressors in more than 80% of music video violence. Males are more than three times as likely to be aggressors, blacks were over represented, and whites underrepresented. Music videos may reinforce false stereotypes. A detailed analysis of music videos raised concerns about its effects on adolescents' normative expectations about conflict resolution, race and male-female relationships [11].

Music lyrics have become increasingly explicit, particularly with references to sex, drugs, and violence. Research linking a cause-and-effect relationship between explicit lyrics and adverse behavioural effects is still in progress at this time. The effect of violent video games on children has been a public health concern for many years. No quantitative analysis of video game contents for games rated as suitable for all audiences was made until 2001 [12]. The study concluded that many video games rated as suitable for all audiences contained significant amount of violence (64% contained intentional violence and 60% rewarded players for injuring a character). Therefore, current ratings of video games leave much room for improvement [13].

Statement of the problem

An average child has seen 100,000 acts of violence including 8,000 murders by the time they leave elementary school, according to Daphne White (1995). Other researchers have found that video games and movies expose children to similar levels of violence. If children watch a television, parents are less able to monitor what is seen; parents are less able to have consistent rules for hobbies, and games; and children perform more poorly in school.

The question of violence in the media and its influence on children is probably the most widely researched domain of media influence. Studies over a span of three decades, beginning in the early 1970s, have shown that significant exposure to media violence increases the risk of aggressive behaviour in children and adolescents.

The internet is also being blamed, with its easy access to information; it is becoming easier to access violence. The effects of violence in American and African culture seem to be elevating, along with increased aggression, with recent shootings and various other acts of needless bloodshed. We seem to be desperate to lay the brunt of the blame on to something and it seems violent media may be the scapegoat we are looking for hence the study.

Objectives of the Study

The study examined the psychosocial influence of Multimedia Violence on children of school age in Nigeria.

The specific objectives are to:

Access the influence of exposure to multimedia violence on children.

Examine the psychological influence of multimedia violence on children.

Examine the social influence of multimedia violence on children.

Research Hypotheses

Two research hypotheses were formulated at 0.05 alpha level.

There is no significant relationship between multimedia and the violence influences on the children.

There is no significant relationship between multimedia violence and the socio economic characteristics of the children.

Research Methodology

Study design

A descriptive survey design was used for this study, because it enhances the systematic description of the existing situation surrounding the research topic. Moreover, the descriptive survey design is less rigorous in terms of cost and time.

Sample size and sampling technique

The target populations of the study were the male and female children of school age. Based on this study, a scheduled interview was employed to obtain information from a total of 150 respondent male and female of school age. The technique used was a purposive sampling technique.

Research Instrument

The Researcher employed guided interview schedule to administer the questionnaires that was author constructed and validated by

psychometrics. The guided interview scheduled was divided into four sections. Section A: gives background information about the respondents. Section B: gives us information about most visited websites and social networks, and what they think about television violence. Section C: the level of violence exposure questionnaire (LVEQ) was developed to assess children's real life violence exposure. This is a self-report scale measuring the frequency of violence exposures at home, school and neighbourhood. Section D: is a self-report questionnaire, which assesses a child's level of empathy. It took the researcher five working days to administer, collect, and collates the results for interpretation and analysis with the help of two research assistants.

Data analysis

The data collected were analysed using correlation and cross tabulation to establish psycho-social influence on multimedia violence among children of school age. Also, frequency counts and percentages were employed to determine the characteristics of the respondents.

Results and Discussion

Socio- economic characteristic of the respondents

Results in Table 1 showed that the respondents within the age 8-10 years were 3.3%, within the age 9-12 years were 3.3% and the respondents within 13-15years were 93.3%. This implies that majority (93.3) of the respondents were in the range 13 to 15 years of age. The sex distribution in Table 1 showed that 56.7% of the respondents were male while 43.3% were female. The distribution of the respondents based on their residential location showed that 73.3% lived in town with their parent while 26.7% lived in staff quarters. This implies that majority of the respondents stayed in town with their parents.

The distribution in Table 1 further showed that all hours are represented in the study, 73.3% of the respondents spent an hour or less per day watching television. It also showed that 20.0% spent between 2 and 3 years while 6.7% spent seven hours and above watching television. This finding implies that, majority of the respondents spent an hour and less watching television per day.

Variables (N=150)	Frequency	Percent (%)
Age		
8-10years	05	3.3
9-12years	05	3.3
13-15years	140	93.3
Total	150	100
Sex		
Male	85	56.7
Female	65	43.3

Total	150	100
Residential Area		
Town	110	73.3
Staff Quarters	40	23.7
Total	150	100
Hours spent watching television		
An hour and less	110	73.3
2-3	30	20.0
4-6	0	0.0
7 and above	10	6.7
Total	150	100

Table 1: Distribution of respondent according to sex, age, residential area, time spent watching television and level of education.

Variables (N=150)	Frequency	Percent (%)
Student level in school		
Primary Education	10	80
Secondary Education	140	20
Total	150	100
Parent Occupation		
Civil servant	60	40.0
Self-employed	85	56.7
Un-employed	05	3.3
Total	150	100
Most television shoe watched		
Situation comedy	35	23.3
Cartoons	62	43.3
Soap operas	05	3.3
Talk show	15	10.0
Dramas	30	20.0
Total	150	100

Table 2: Distribution of respondents based on education, parents occupation and type of television show mostly watched.

Table 2, revealed that, all the respondents are of schooling age. 80.0% of the respondents are in their junior secondary education while 20.0% of the respondents were in primary school.

Results in Table 2 also showed that 23.3% of the respondents mostly watched situation comedy show, 43.3% watched cartoons, 3.3%

watched soap operas, and 10.0% watched talk show while 20.0% of the respondents watched dramas mostly on television show.

Variables (N=150)	Frequency	Percent (%)
Time spent in playing video game		
Less than an hour	110	73.3
2-3	25	16.7
4-6	10	6.7
7 and above	05	3.3
Total	150	100
Time spent in watching movie		
Less than an hour	90	60.0
2-3	50	33.3
4-6	05	3.3
7 and above	05	3.3
Total	150	100
Time spent on internet		
Less than an hour	20	58.6
2-3	7	23.3
4-6	1	6.6
7 and above	1	3.3
Total	150	100

Table 3: Distribution of respondents according to the time spent per day in playing video games, watching movie, internet browsing, the type of video game and social network involved.

Results in Table 3 showed that all the hours spent in playing video game per day were represented in the study, 73.3% of the respondent spent less than an hour in playing video game per day, 16.7% spent between two and three hours, 6.7% spent between four and six hours while 3.3% spent seven hours and above. Results in Table 4 also

showed that all the hours spent in watching movie per day were represented in the study, 60.0% of the respondent spent less than an hour in watching movie per day, 33.3% spent between two and three hours, 3.3% spent between four and six hours while 3.3% also spent seven hours and above.

Statements (N=150)	Frequency and Percentage	
	Yes	No
Do you think that violence on TV would make children act violently after watching it	120 (80.0%)	30 (20.0%)
Do you think violence on TV has any effect on children	105 (70.0%)	45 (30.0%)
Do they tends to practice what they see on TV or video games	135 (90.0%)	15 (10.0)
Do you think TV has any beneficial effect on children	135 (90.0%)	15 (10.0%)
Any relationship with children concerning the multimedia	90 (60.0%)	60 (40.0%)
Do you think V-Chips will solve the problem of violence on television today	90 (60.0%)	60 (40.0%)
Source: Field survey, 2012		

Table 4: Distribution of respondent by the harmful and beneficial effect of TV and video games on children.

Results in Table 4 further showed that all the hours spent on internet per day were represented in the study, 69.0% of the respondent spent less than an hour on internet use per day. 23.3% spent between two and three hours, 6.6% spent between four and six hours while 3.3% also spent seven hours and above on the use of internet.

Statement (N=150)	Frequency and percentage		
	Never	Sometimes	A lot
I have seen someone carrying a gun	55 (36.6%)	55 (36.6%)	40 (26.7%)
I have heard about someone getting killed	20 (13.3%)	45 (30.0%)	85 (56.7%)
I have seen people get bullied	25 (16.7%)	60 (46.7%)	55 (36.6%)
I have seen people steal	5 (3.3%)	60 (40.0%)	85 (56.7%)
I have seen people strangling their necks in fights	35 (23.3%)	80 (53.3%)	35 (23.3%)
I have seen people punching each other	10 (6.7%)	50 (33.3%)	90 (60.0%)
I have seen people smoking	5 (3.3%)	60 (46.7%)	75 (50.0%)
I have seen people taking alcohol and drugs	10 (6.7%)	65 (43.3%)	75 (50.0%)

Source: Field survey, 2012

Table 5: Distribution of respondents by the level of violence exposure.

The results in the Table 5 showed that all the respondents (150) view the assessment of the violence exposure by the children as shown in the table given above as; 36.7% of the respondent who have seen someone carrying a gun are always very upset. 56.7% of the respondent who have had about someone getting killed are very upset, 50.0% of the respondent who have seen people bullied are very upset, 36.7% of the respondent who have seen people steal are very upset.

The 40.0% of the respondent who have seen people strangling their necks in fights are very upset, 36.6% of the respondent who have seen people punching each other are very upset, 40.0% of the respondent who have seen people smoking are very upset while 40.0% of the respondent have seen people taking alcohol and drugs are very upset.

What was the impact of these statement on you	Frequency and percentage (N=150)			
	Not upset	Upsetting	Somewhat upsetting	Very upsetting
I have seen someone caring a gun	60 (40.0%)	15 (10.0%)	20 (13.3%)	85 (56.7%)
I have heard about someone getting killed	40 (26.7%)	20 (13.3%)	5 (3.3%)	85 (56.7%)
I have seen people get bullied	25 (16.7%)	35 (23.3%)	15 (10.0%)	75 (50.0%)
I have seen people steal	65 (13.3%)	65 (43.3%)	10 (6.7%)	55 (36.7%)
I have seen people strangling their necks in fights	25 (16.7%)	45 (30.0%)	20 (13.3)	60 (40%)
I have seen people punching each other	15 (10.0%)	55 (36.7%)	25 (16.7%)	55 (36.6%)
I have seen people smoking	40 (26.7%)	40 (26.7%)	10 (6.7%)	60 (40%)
I have seen people taking alcohol and drugs	35 (23.3%)	35 (23.3%)	20 (13.3%)	60 (40.0)

Source: Field survey, 2012

Table 6: Distribution of respondents by impact of violence exposure.

From the Tables 6 and 7, the individuals' empathy of the respondent was given as; 70.6% of the respondent are really bother when seeing people fighting. 96.7% of the respondent agreed that when fighting is on it should be stopped, 86.6% of the respondent agreed that when something bad is about to happen to someone, it should be stopped, 80.0% of the respondents whom notice something that can conflict

amongst people it should be resolved. 90.0% of the respondent when notice things that can lead to accident, they should be prevented, 70.0% of the respondent were frightens at the sight of blood, 66.9% of the respondent startles when someone bleeds while 83.3% of the respondent were always concerned when they see someone in pain.

Statement	Frequency and percentage (N=150)			
	No	Maybe	Probably	Yes
When I see people fighting, it really bothers me	20 (13.3%)	5 (3.3%)	20 (13.3%)	105 (76.6%)
When there is a fight, it should be stopped	-	-	5 (3.3%)	145 (96.7%)
When I notice something bad about to happen to someone, it should be presented	5 (3.3%)	102 (6.7%)	51 (3.3%)	130 (86.6%)
When I see someone involving in a criminal act, it should be reported	5 (3.3%)	5 (3.3%)	5 (3.3%)	135 (90.0%)
When I notice things that cause conflict amongst people, is should be prevented	20 (13.3%)	-	10 (6.7%)	120 (80%)
When I noticed things that can lead to accident, they should be prevented	5 (3.3%)	-	10 (6.7%)	135 (90.0%)
The sight of blood frightens me	30 (20.0%)	-	15 (10.0%)	105 (70%)
When I see someone bleeding, it startles me	15 (10.0%)	35 (3.3%)	30 (20.0%)	70 (66.7%)
I am concerned, when I see someone in pain	10 (6.7%)	-	15 (10.0%)	125 (83.3%)

Source: Field survey, 2012

Table 7: Distribution of respondent according to psychosocial effect of violence exposure.

Correlations					
			Do they tend to practice what they see on TV or video games	What is your relationship with your children concerning the multimedia	
Spearman's rho	Do they tend to practice what they see on TV or video games	Correlation coefficient	1.000	0.408	
		Sig. (2-tailed)		0.242	
		N	10	10	
	What is your relationship with your children concerning the multimedia	Correlation coefficient	0.408	1.000	
		Sig. (2-tailed)	0.242		
		N	10	10	
Do they tend to practice what they see on TV or video games*what is your relationship with your children concerning the multimedia cross tabulation					
			What is your relationship with your children concerning multimedia	Total	
			No relationship	There is a relationship	
Do they tend to practice what they see on TV or video games	Yes	Count	6	3	9
		% within do they tend to practice what they see on TV or video games	66.7%	33.3%	100.0%
		% within what is your relationship with your children concerning the multimedia	100.0%	75.0%	90.0%
		% of Total	60.0%	30.0%	90.0%
	No	Count	0	1	1

	% within do they tend to practice what they see on TV or video games	0	100.0%	100.0%
	% within what is your relationship with your children concerning the multimedia	0	25.0%	10.0%
	% of Total	0	10.0%	10.0%
Total	Count	6	4	10
	% within do they tend to practice what they see on TV or video games	60.0%	10.0%	100.0%
	% within what is your relationship with your children concerning the multimedia	100.0%	100.0%	100.0%
	% of Total	60.0%	40.0%	100.0%

Table 8: Cross tabulation of variables examining the social influence of multimedia violence on children.

In the Table 8, cross tabulation was used to further explain the relationship between the variables parental involvement and tendency of practicing what is seen on TV set or video games.

Parents who have no relationship with their children were susceptible to high occurrence (6(60%)) of practicing what they see on TV or video games. Conversely, there is lower occurrence where parents have relationship with their children in monitoring what they see. Here the tendency of practicing what they see is low (3(30%)).

Hypothesis 1

There is no significant relationship between multimedia and the violence influence on children. The result of the study revealed that the p-value is less than 0.005, which is the standard Alpha, implying that the variables in the level of violent exposure are relevant in predicting multimedia in relation to violent influence on the children.

	Test value=0					
	t	df	Sig. (2-tailed)	Mean difference	95% Confidence Interval of the differences	
					Lower	Upper
Violence	34.388	23	0.000	45.33333	42.6062	48.0605

Table 9: One-sample test showing the Relationship between multimedia and the violence influence on children.

Hence, since p-value is less than 0.05, the Ho is rejected, which implies that there is a significant relationship between multimedia and the violent influence on children (Table 9).

Hypothesis 2

The Table 10 revealed the value of t as 11.255, df as 22 and p-value as 0.000. Which implies that there is a statistical significant

relationship between the level of violence exposure and socio-economic characteristics of the respondent in the study area?

Hence, Ho which states that there is no significant relationship between multimedia violence and the socio economic characteristics of the children is therefore rejected and research alternative is accepted.

	Paired Differences	Mean	Std. deviation	Std. Error Mean	95% Confidence Interval of the differences		t	df	Sig. (2-tailed)
					Lower	Upper			
					Paired 1	Violence HYP2 Socio-Economic			

Table 10: Paired sample test of the relationship between multimedia violence and the socio-economic characteristics of the children.

Conclusions

The result of the tested hypotheses revealed that there is a relationship between the multimedia violence and the socio-economic characteristics as observed in the children's age and level in school, which implies that the age and level in school increase, there is lower tendency in influence of multimedia violence on the children.

Recommendations

Based on the results of the study, the following recommendations were made:

Parents/guardians should become more interested in the types of multimedia to which their children may be exposed, such as programs that portray irresponsible sex and violence and questionable internet sites.

Express support for good media. In addition to writing to stations that broadcast responsible and good television programs, support legislation that encourage more responsible media use.

Restrict television, video games, and internet time to one or two hours per day, in order words, it's what is watched more than how much is watched that is important.

Discuss any violent content with your children, making sure that they have a firm grasp of the difference between fantasy and reality.

References

1. American Psychological Association (2002) Violence on Television.
2. American Academy of Paediatrics (2001) Media violence. *Pediatrics* 108: 1222-1226.
3. Dietz WH, Gortmaker SL (2000) Do we fatten our children at the television set? Obesity and television viewing in children and adolescents. *Pediatrics* 75: 807-812.
4. American Academy of Pediatrics (2001) Sexuality, contraception and the media. Committee on Public Education. *Pediatrics* 107: 191-194.
5. American Academy of Child & Adolescent Psychiatry (2012) Chronic violent video game exposure and desensitization to violence: Behavioral and event-related brain potential data. *Journal of Experimental Social Psychology* 42: 532-539.
6. *Pediatrics of Child Health* (2002) The Effects of Songs With Violent Lyrics on Aggressive Thoughts and Feelings by Craig Anderson, Nicholas Carnagey and Janie Eubanks. *Journal of Personality and Social Psychology* 84.
7. Strasburger VC (1986) Does television affect learning and school performance? *Paediatrician* 38: 141-147.
8. Certain LK, Kahn RS (2002) Prevalence, correlates and trajectory of television viewing among infants and toddlers. *Pediatrics* 109: 634-642.
9. Ed Donner JR (2011) Internet addiction disorder: Causes, symptoms, and consequences.
10. Crespo CJ, Smit E, Troiano RP, Bartlett SJ, Macera CA, et al. (2001) Television watching, energy intake, and obesity in US children: Results from the third National Health and Nutrition Examination Survey, 1988-1994. *Arch Pediatric Adolescent Med* 155: 360-365.
11. Rich M, Woods ER, Goodman E, Emans J, Du Rant RH (1998) Aggressors or victims: Gender and race in music video violence. *Pediatrics* 101: 669-674.
12. Thompson K, Fumie Y (2001) Depiction of alcohol, tobacco and other substances in G-rated animated feature films. *Pediatrics* 107: 1369-1374.
13. Wals D, Gentile DA (2001) Validity test of movie, television and video-game ratings. *Paediatrics* 107: 1302-1308.