

# **RESEARCH ARTICLE**

## CORRELATION OF CHILD'S AGGRESSIVE BEHAVIOR AND TELEVISION EXPOSURE: A CROSS SECTIONAL STUDY IN AL AHSA, KINGDOM OF SAUDI ARABIA

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Manuscript Info	Abstract
Manuscript History Received: 25 November 2016 Final Accepted: 27 December 2016 Published: January 2017	<ul> <li>Objective: establishing a clear and direct correlation between the aggressive behaviors of the children and the exposure to TV violent programs.</li> <li>Method: 593 children represented the main sample of this research. 51,5% of the sample are males, whereas 48,5% are females. They had ages among 6 and 13 years old. They are residents in Al-Ahsa region (2016). The qui-square test was the main tool to check the influence of the TV watching by children and their aggressive actions.</li> <li>Results: Almost all the respondents (99,3%), reported watching TV, most of them reported watching TV 2hours per day (33,4%), while the most of the children (43,7%) esteemed to watch TV a period that exceeds 4 hrs / week. Data analysis prevailed that Children's the TV exposure was not related to children's behavior according to parents (p=0,379) and teachers (p=0,078).</li> <li>Conclusion: Although this research detected a lowproportion of aggressive children, the aggressive behavior is still a recurrent broad global problem that should be reported and treated in early ages. This can happen through reducing the exposure to media as it the key reason for the growth of violence among children.</li> </ul>
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Methodology:-

The researcher depended on the descriptive analysis approach to estimate the socio-demographic factors and behavior characteristics under the influence of TV watching and computer use.

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### Case study population:-

It composed of children who are residents of Al-Ahsa region. They were withages among 6 and 13 years old. In this case study, the parents and the teachers have responded to 2 questionnaires (BPI questionnaires).

### Study tool:-

The pre-formed and self-administered questionnaire was prepared and it requires information about:

1. Socio-demographic and lifestyle data such as: age, gender, residence, number of brothers and sisters, parent's education level, parent's monthly income, TV watching, average/day, average/week, Computer use, average computer/day, average computer/week.

- 2. Behavior score by parents' assessment including 28 questions. A score of 1 was given to "always" and 2 to "sometimes" and 3 to "never". For each subject, the researcher calculated a maximum score of 84. A scoring system was used with the purpose to measure the value of the respondents' aggressive behavior. The children behavior was categorized into 3 levels indicated by inadequate behavior (0-28), average behavior (29-56) and adequate behavior (57-84).
- 3. Behavior score by teachers' assessment including 25 questions. A score of 1 was given to "always" and 2 to "sometimes" and 3 to "never". For each subject, the researcher calculated a maximum score of 75. A scoring system was applied to measure the respondents' aggressive behavior. The children behavior was categorized into 3 levels indicated by inadequate behavior (0-25), average behavior (26-50) and adequate behavior (51-75).

## Statistical analysis:-

(SPSS, version 20) was the program that was used to apply the descriptive analysis on the data using the Statistical Package for Social Sciences in the program.

The correlation of the participants' scores of the behaviors as a function of the exposure to TV was evaluated using:

- 1. The frequencies and the percentages.
- 2. The Chi-squared test which is famous for its accurate results.

The statistical significance for the data was accepted at value of p < 0.05.

## **Results:-**

### Socio-demographic and lifestyle characteristics:-

The socio-demographic characteristics gave results that are listed in the next table (1)

	Data	Frequency	Percent (%)
	Gender		
	Male	305	51,5
	Female	287	48,5
	Total	592	100,0
Residence			
	Falt	295	50,2
	Small house	144	24,5
	Villa	141	24,0
	Other	8	1,4
	Total	588	100,0
Income			
	Poor	38	6,5
	Enough	248	42,6
	Average	238	40,9
	High	58	10,0
	Total	582	100,0
Fatl	ner education		
	Illiterate	26	4,4
	Primary	64	10,9
	Intermediate	173	29,5
	Secondary	104	17,7
	Higher	220	37,5
	Total	587	100,0
Mot	her education		
	Illiterate	34	5,8
	Primary	93	15,7
	Intermediate	179	30,3
	Secondary	128	21,7
	Higher	157	26,6

Table 1:-Socio-demographic factors

Total	591	100,0

Our study included 593 children from Al-Ahsa region aged between 6 and 13 years old with a meanage of (7,90 years). Overall, studied children had between 0 and 13 brothers (mean number: 2,53) and between 0 and 10 sisters (mean number: 2,33). By looking at table (1), related to the distribution of respondents according to demographic factors:

The survey included(51,5%) of males and (48,5%) of females.

Nearly the half of participants lived in Falt (50,2%).

Most of the children's families had enough monthly income (42,6%) and only 10% had a high monthly income.

The majority of the children had parents with education as follows: a father with high level of education (37,5%) and a mother with an intermediate level of education (30,3%).

The lifestyle characteristics are shown in tables below

	Data	Frequency	Percent (%)
Wate	ching TV		
	Yes	586	99,3
	No	4	,7
	Total	590	100,0
Average/day			
	< 1 hour	10	1,7
	1 hour	184	31,5
	2 hours	195	33,4
	3 hours	121	20,7
	4 hours	63	10,8
	> 4 hours	11	1,9
	Total	584	100,0
Average/week			
	<1 hour	1	,2
	1 hour	34	5,9
	2 hours	75	13,1
	3 hours	70	12,2
	4 hours	143	24,9
	> 4 hours	251	43,7
	Total	574	100,0

Approximately all of the children, (99,3%), were reported to watch TV. While, 2hours per day TV viewing was reported by the third of participants (33,4%), also 31,5% of respondents reported spending 1 hour daily watching television.

43,7% of the children are esteemed to spend more than 4 hours weekly on TV watching.

	Data	Frequency	Percent (%)	
	Computer use			
	Yes	501	85,5	
	No	85	14,5	
	Total	586	100,0	
Ave	erage Computer/day			
	< 1 hour	17	3,5	

### Table :- Computer use

11	nour	269	54,9
2 h	ours	125	25,5
3 h	ours	47	9,6
4 h	ours	21	4,3
> 4	hours	7	1,4
0	ther	4	,8
Т	otal	490	100,0
Average Computer/	week		
< 1	hour	3	,6
11	nour	84	17,0
2 h	ours	88	17,8
3 h	ours	88	17,8
4 h	ours	121	24,4
> 4	hours	111	22,4
Т	otal	495	100,0

High number and percentage, 501 and 85,5%, of the little participants were report to using computer. Overall, almost the half of respondents (54,9%) were allowed to use the computer 1 hour daily, while the quarter (25,5%) used the computer 2 hours daily. Among the participants, approximately the quarter (24,4%), were permitted to use the computer for 4 hours per week where 22,4% of children used computer for more than 4 hours weekly, and nearly 17% of the studied respondents used the computer 1 hour, 2 hours or 3 hours weekly (17%, 17,8%, 17,8% respectively).

### **Behavior scores:-**

	Data	ata Frequency	
Sco	re by parents		
	Inadequate behavior	9	1,5
	Average behavior	240	40,9
	Adequate behavior	338	57,6
	Total	587	100,0
Scol	re by teachers		
	Averagebehavior	118	39,5
	Adequatebehavior	181	60,5
	Total	299	100,0

Referring to the responses of the parents, most of the children had an adequate behavior (57,6%), where 40,9% had average behavior, and only 1,5% had aggressive behavior.

Referring to the responses of the teachers, the majority of the investigated children (60,5%) had an adequate behavior and approximately 39,5% of participants had average behavior.

## The Correlation between the aggressive behavior of the children and the exposure to TV:-

Data analysis showed that Children's television exposure was not related to children's behavior according to parents (p=0,379) and teachers (p=0,078). Referring to the BPI by teachers (p=0,012), the study of relationship between the children's aggression and the television exposure showed a significant association between the aggressive actions against others and the daily-spent time in watching TV during childhood. On the other hand, referring to the BPI by parents (p=0,212), the effect sizes for the relationship between television exposure and inadequate behavior were not statistically significant as it was close to zero. Furthermore, while a significant association was observed between weakly-TV exposure and child behavior according to parents, (p=0,000); the effect of weakly-TV exposure was not significant referring to the BPI by teachers, (p=0,104).

# **Table:-** Correlation between the aggressive behavior of children and the exposure to TV **Table:-** Correlation between Childs aggressive behavior and TV exposure

Characteristic	Watchi	<i>p</i> -value (%)	
	Yes	No	
	n (%)	n (%)	
Overall (n=593)	586 (99,3)	4 (0,7)	-
Score by parents			
Inadequatebehavior	9 (1,5)	0 (0,0)	0,379
Average behavior	237 (40,4)	3 (0,5)	
Adequate behavior	336 (57,7)	1 (25,0)	
Total	582 (100,0)	4 (100,0)	
Score by teachers			
Average behavior	115 (39,0)	2 (100,0)	0,078
Adequate behavior	180 (61,0)	0 (0,0)	
Total	295 (100,0)	2 (100,0)	

Chi-Square Tests						
Score by parents * Watching TV	Value	df	Asymp. Sig. (2-sided)			
Pearson Chi-Square	1,942 <sup>a</sup>	2	,379			
Likelihood Ratio	1,977	2	,372			
Linear-by-Linear Association	1,392	1	,238			
N of Valid Cases	586					
a. 3 cells of about (50,0%) are expected t	a. 3 cells of about (50,0%) are expected to have count with less than 5. The minimum expected count is ,06.					

	Chi-Square Tests					
Score by teachers *	Value	Df	Asymp. Sig.	Exact Sig. (2-	Exact Sig. (1-	
Watching TV			(2-sided)	sided)	sided)	
Pearson Chi-Square	3,098 <sup>a</sup>	1	,078			
Continuity Correction <sup>b</sup>	1,069	1	,301			
Likelihood Ratio	3,747	1	,053			
Fisher's Exact Test				,154	,154	
Linear-by-Linear	3,087	1	,079			
Association						
N of Valid Cases	297					
a. 2 cells of about (50,09	%) have expected	ed to have co	unt less than 5. The	minimum expected	count is ,79.	
	b. This c	can only com	puted for a 2x2 table	е.		

# Average/day \* Score by parents.

		0	Crosstab			
				Score by parents		
			Inadequate behavior	Average behavior	Adequate behavior	
Average/day	< 1	Count	0	1	9	10
	hour	% within Score by	0,0%	0,4%	2,7%	1,7%
		parents				
	1 hour	Count	2	82	96	180
		% within Score by parents	28,6%	34,5%	28,7%	31,0%
	2 hours	Count	5	76	114	195
		% within Score by	71,4%	31,9%	34,0%	33,6%
		parents				
	3 hours	Count	0	53	68	121
		% within Score by	0,0%	22,3%	20,3%	20,9%

		parents				
	4 hours	Count	0	23	40	63
		% within Score by	0,0%	9,7%	11,9%	10,9%
		parents				
	> 4	Count	0	3	8	11
	hours	% within Score by	0,0%	1,3%	2,4%	1,9%
		parents				
Total	l	Count	7	238	335	580
		% within Score by	100,0%	100,0%	100,0%	100,0%
		parents				

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Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	13,220 <sup>a</sup>	10	,212		
Likelihood Ratio	15,754	10	,107		
Linear-by-Linear Association	1,183	1	,277		
N of Valid Cases	580				
a. 8 cells of about (44,4%) are expected to have count less than 5. The minimum expected count is ,12.					

## Average/day \* Score by teachers

		Crosstab			
			Score by	v teachers	Total
			Average behavior	0	
Average/day	< 1 hour	Count	0	3	3
		% within Score by teachers	0,0%	1,7%	1,0%
	1 hour	Count	32	59	91
		% within Score by teachers	27,8%	33,1%	31,1%
-	2 hours	Count	44	49	93
		% within Score by teachers	38,3%	27,5%	31,7%
	3 hours	Count	32	35	67
		% within Score by teachers	27,8%	19,7%	22,9%
	4 hours	Count	6	27	33
		% within Score by teachers	5,2%	15,2%	11,3%
	>4 hours	Count	1	5	6
		% within Score by teachers	0,9%	2,8%	2,0%
Total		Count	115	178	293
		% within Score by teachers	100,0%	100,0%	100,0%

Chi-Square Tests					
	Value	Df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	14,572 <sup>a</sup>	5	,012		
Likelihood Ratio	16,408	5	,006		
Linear-by-Linear Association	,463	1	,496		
N of Valid Cases	293				
a. 4 cells of approximately (33,3%) are expected to have count less than 5. The minimum expected count is 1,18.					

# Average/week \* Score by parents.

		Cı	osstab			
				Score by parents	6	Total
			Inadequate behavior	Average behavior	Adequate behavior	
Average/week	< 1	Count	0	1	0	1
	hour	% within Score by parents	0,0%	0,4%	0,0%	0,2%
	1 hour	Count	2	10	21	33
		% within Score by parents	28,6%	4,3%	6,3%	5,8%
	2 hours	Count	0	47	28	75
		% within Score by parents	0,0%	20,1%	8,5%	13,1%
	3 hours	Count	0	38	32	70
		% within Score by parents	0,0%	16,2%	9,7%	12,2%
	4 hours	Count	2	49	91	142
		% within Score by parents	28,6%	20,9%	27,5%	24,8%
	> 4	Count	3	89	159	251
	hours	% within Score by parents	42,9%	38,0%	48,0%	43,9%
Total		Count	7	234	331	572
		% within Score by parents	100,0%	100,0%	100,0%	100,0%

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)		
Pearson Chi-Square	35,155 <sup>a</sup>	10	,000		
Likelihood Ratio	33,768	10	,000		
Linear-by-Linear Association	10,716	1	,001		
N of Valid Cases	572				
a. 8 cells of about (44,4%) are expected to have count less than 5. The minimum expected count is ,01.					

# Average/week \* Score by teachers.

		Crosstab			
			Score by	Total	
			Average behavior	Adequate behavior	
Average/week	0	Count	0	1	1
		% within Score by teachers	0,0%	0,6%	0,3%
	1 hour	Count	6	3	9
		% within Score by teachers	5,3%	1,7%	3,1%
	2 hours	Count	8	26	34
		% within Score by teachers	7,1%	15,0%	11,9%
	3 hours	Count	17	16	33
		% within Score by teachers	15,0%	9,2%	11,5%
	4 hours	Count	25	41	66
		% within Score by teachers	22,1%	23,7%	23,1%
	> 4 hours	Count	57	86	143
		% within Score by teachers	50,4%	49,7%	50,0%
Tota	1	Count	113	173	286

	% within Score by teachers	100,0%		100,0%	100,0%
	Chi-Square Te	sts			
	Value	df		Asymp. Sig	g. (2-sided)
Pearson Chi-Square	9,134	a	5		,104
Likelihood Ratio	9,62	8	5		,086
Linear-by-Linear Association	,02	8	1		,867
N of Valid Cases	28	б			
2 = 2 = 11 = 2 = 1 = 1 = 1 = 1 = 1 = 1 =		<b>T</b> 1		1	

a. 3 cells of about (25,0%) are expected to have count less than 5. The minimum expected count is ,40.

## **Recommendations:-**

Huesmann, L. R. et al. mentioned that children as increasingly becoming heavy media consumers (1), they also noted the violent content of much of the media directed at children and their harmful influence on the advancement of the outcomes of the behaviors of the children. This study suggests that the ACT program can detect the influence of media violence on the advancement of the young children, and it can teach parents some strategies that can help them decreasing the watching of violence TV programs by their children. Further, the researchers recommended the restriction as much as possible of violent TV programs by parents for young children and preteens, and stressed on the importance of the strict control on the media content before allowing their child to view TV programs even those that seemed to be safe.

In addition, the American Academy of Pediatrics suggested dropping the total time that children spend watching TV to just 1 to 2 hrs / day high quality entertainment programs (2) and this suggestion was also adopted by Robertson LA et al. who wanted to study "check if the excessive watching of the television during the childhood and the adolescence is related to the increased antisocial behavior in the early adulthood" (3), in fact researchers have found that each extra hour of watching the TV can increase the tendency to the odds for antisocial outcomes.

Behavior aggression is multi-factorie<sup>1</sup>, it can also be present as a part of other neuro-psychic disorders and psychiatric syndromes (autism, Tourette...), or related to direct or indirect exposure to violence (4), in all cases children should be supported at many levels: socially by parents and close entourage, and at larger scale by the teachers or even medical stuff experts. Actually, several aggressively control activities can be set<sup>1</sup> to help children to solve their violent behavior issues. Ruble and Seidman (Ruble & Seidman, 1996, cited in National Crime Prevention 1999: 52) reported the need for preventive programs targeting the child and his parents. Hence sincere work should be exerted to at the level of the parents / children relationship. Additionally as verbal skills had found to be inversely correlated with the impulsivity and the crime behavior (Moffitt, 1993; Lynam, Moffit&Stouhamer-Loeber, 1993; Moffitt& Silva, 1988), butter communication skills by early language intervention and development makes easy for the child to socialise (Keenan & Shaw, 1997) and feel being understood.

High quality care of children is essential as it seems that the behavior of the children has a direct relationship with the quality of this care. In their study Vandel and Wolfe (Vandell& Wolfe, 2000) have found that the more quality of care was high, the fewer reports of behavior problems were.

Parents and educators could also play a primordial role helping children to develop social kills, by being patients and spending more time directly teaching them skills.

## **Conclusion:-**

According to this research, most of the children that were included in this study showed an adequate behavior.On the other hand, although both parents and teachers detected low proportions of aggressive children, effective efforts and strategies for reducing children's exposure to media should be followed. This is because many studies stated the negative effect of the exposure to TV on the health and the behavior of the children. This can surely avoid the society the risk of the development of the aggressive and violent actions and behaviors in adulthood.

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