



## RESEARCH ARTICLE

### A STUDY TO ASSESS THE KNOWLEDGE ON ILL EFFECTS OF ELECTRONIC GAMES IN CHILDREN IN ORDER TO PROVIDE INFORMATION BOOKLET AMONG MOTHERS IN CHILD CARE AREAS IN SMVMCH HOSPITAL, AT PUDUCHERRY

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#### ABSTRACT

Today's games are much more complex and interesting, and the technology has advanced to the point where a gamer can become immersed in a multimedia-enabled "Virtual Reality" or alternate world. Computer games and video games are popular past time for many children, but very little research has been done on how these affect children's health. It may be appropriate to look at research studies into the health effects, of watching television because computer or video games involve no physical activity.

## INTRODUCTION

Today's games are much more complex and interesting, and the technology has advanced to the point where a gamer can become immersed in a multimedia-enabled "Virtual Reality" or alternate world. Computer games and video games are popular past time for many children, but very little research has been done on how these affect children's health. It may be appropriate to look at research studies into the health effects, of watching television because computer or video games involve no physical activity.

### NEED FOR THE STUDY

Electronic games especially video games and computer games consumption are a powerful influence in the lives of most children. About 10-20% of the gaming market is slowly moving towards 3D, and 32% of adolescents preferred fantasy violence and sports games, 20% preferred the game of general entertainment, 17% preferred human violence and 2% use game with educational content around 95% of those surveyed said they'd used an electronic device such as a television, computer, video game or cell phone - within the hour before bed at least a few nights a week.

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### Statement of the problem

A study to assess the knowledge on ill effects of electronic games in children in order to provide an information booklet among mothers in child care areas of Pondicherry Institute of Medical Sciences, Puducherry.

### Objectives

- To identify the level of knowledge on ill effects of electronic games in children among mothers in child care areas.
- To associate the level of knowledge on ill effects of electronic games in children among mothers with selected demographic variables.
- To administer an information booklet on ill effects of electronic games in children among mothers.

### Assumptions

- Mothers may have some knowledge on ill effects of electronic games in children.
- An information booklet may enhance the knowledge level of mothers on ill effects of electronic games in children.

**Table 1. Frequency and percentage distribution of socio-demographic characteristics of mother**

SL. No	SOCIO-DEMOGRAPHIC CHARACTERISTICS	NO.	PERCENTAGE (%)
1	<b>Age of mother</b>		
	a) 20-25 yrs	17	34
	b) 26-30 yrs	20	40.0
	c) >30 yrs	13	26.0
2	<b>Education of the mother</b>		
	a) Primary school	10	20.0
	b) Higher secondary school	27	54.0
	c) Graduate and above	13	26.0
3	<b>Monthly income (in Rs.)</b>		
	a) <10000	34	68.0
	b) >10000	16	32.0
4	<b>Area of living</b>		
	a) Urban	27	54.0
	b) Rural	23	46.0
5	<b>Area of child</b>		
	a) 3-6 yrs	34	68.0
	b) 6-12 yrs	16	32.0
6	<b>No of children</b>		
	a) 1	14	28.0
	b) 2	33	66.0
	c) 3	3	6.0
7	<b>Type of electronic games</b>		
	a) Video games	7	14.0
	b) Mobile phone games	33	66.0
	c) Any other	10	20.0

**Table 2. Response of mothers for each question**

S.NO	Knowledge Question	Responses			
		Correct Answers		Incorrect Answers	
		No.	%	No.	%
1	Meaning of electronic game	35	70	15	30
2	Example for electronic game	19	38	31	62
3	Most accessible type of electronic game among children	47	94	3	6
4	Effect of constant use of mobile phone in children	33	66	17	34
5	Health problem of prolonged use of electronic game	7	14	43	86
6	Risk of obesity in children who play electronic game	30	60	20	40
7	Postural problems among children who play electronic games	24	48	26	52
8	Effect of playing continuous video game	40	80	10	20
9	Negative emotional symptoms of video games addiction	29	58	21	42
10	Your response to child playing video games for more than 2hrs	39	78	11	22
11	Management of own leisure time by children	27	54	23	46
12	Best method to divert the child from playing electronic game	41	82	9	18
13	If the child is getting addicted to electronic games what will be your response	12	24	38	76
14	The best method to prevent long time playing of electronic games	22	44	28	56
15	Main cause of electronic game addiction in children	23	46	27	54

**Table 3. Descriptive statistics for knowledge on ill effects of electronic games in children among the mothers**

Variable	Descriptive statistics					
	Mean	Median	SD	SE	Range	
					Minimum	Maximum
Knowledge on ill effects of electronic games in children	8.56	9.00	2.45	0.347	3	14

**Table 4. Frequency and percentage distribution of mothers according to level of knowledge on ill effects of electronic games in children**

Level of Knowledge	Score	Frequency	Percentage (%)
Adequate knowledge	>75	4	8
Moderately adequate knowledge	50.1-75%	32	64
Inadequate knowledge	≤50%	14	28

**Operational definition****Knowledge of ill effects of electronic games**

It is the responses obtained from the mothers for structured questionnaire on ill effects of electronic games, which the children may manifest include the consequences like visual problem, deficit performance, obesity, back ache, etc.

**Electronic games**

An electronic game is a game that employs electronics to create an interactive system with which children can play such as video games, computer games and cell phone games.

**Mother**

It refers to women who are having children of age group between 3 to 12 years.

**Child care areas**

Units where children are treated i.e, Paediatric OPD, Paediatric general ward.

**METHODOLOGY**

Descriptive research design was used in this study to assess the knowledge on ill effects of electronic games in children in order to provide handout among mothers in child care areas of SMVNC. After obtaining the informed consent, data were collected from 50 mothers using structured knowledge questionnaire. purposive sampling technique was used information booklet was administered to study samples after data collection.

**Criteria**

The sample were selected based on the following inclusion and exclusion criteria

**Inclusion Criteria**

Mothers who are

- Willing to participate in the study
- Able to understand, read & write tamil
- Having children between the age group of 3 to 12 year
- Who are present during the time of study

**Exclusion Criteria**

- Mothers of children with acute illness such as post - operative patients, child on mechanical ventilation (PICU).

**Research Instruments /Tool Used****Description of the tool**

The tool consist of two parts, they are as follows.

**Part 1: Socio-demographic variables**

Include age of the mother, education of the mother, monthly income, area of living, age of children, number of children & type of electronic games used.

**Part 2: Structured questionnaire**

This part of tool consists of items related to knowledge of mother on ill effects of electronic games in children. It consists

of 15 items and these are objective type multiple choice questions that helps in assessing their knowledge.

**Scoring procedure**

Each item had 4 responses with only one correct answer. The maximum score was 15. the correct response to each item was scored “one” and “zero” for wrong response. The score was converted into percentage.

Level of Knowledge	Score	Percentage%
Adequate	> 12	>75
Moderately adequate	9-12	50.1-75
Inadequate	<9	50 or less

**RESULTS**

Study results revealed the majority of (64%) mothers have moderately adequate knowledge on ill effects of electronic games in children. And there is no significant association between knowledge of mother with sociodemographic variables such as age of mother, monthly income, area of living age of the children, no. of children and type of electronic game.

**Conclusion**

The study finding revealed that mothers under the study had a moderately adequate knowledge on ill effects of electronic games in children. Information booklet was provided to the mother for improving knowledge level on ill effects of electronic games in children

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