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# A STUDY OF EFFECTIVENESS OF ADVERGAMES ON CHILDREN

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## Abstract

*In the modern media environment children usually spend most of their leisure time in playing games, watching TV, surfing on the internet which makes them more critical and knowledgeable thus, leading to changes in purchasing preferences and intentions. Advergaming is a new and emerging tool of Digital marketing used to entice adults and children to play in branded environments.*

*The paper aims to determine the effectiveness of advergaming on young children on the basis of modified hierarchy of effects model. A qualitative research was done on controlled group of young children. Also this paper provides a first opportunity to do this kind of research in an Indian context.*

*A qualitative research was conducted in the private computer classes in the Gurgaon region. The sample population consisted of controlled group of 15 children in the age group of 5-8 years who could use internet and could also respond to simple paper and pencil surveys. An experiment performed over young children by providing them the computers to play KFC game online for certain minutes so as to check their response after game playing on the basis of attention, recognition, liking, preference, intention and choice.*

*Finally it was concluded that advergaming is very effective in influencing children buying behaviour as majority of them are able to retain character in their mind showed in the game and KFC is the brand which is preferred over other brands by the children but not for consumption purpose. KFC is the brand, which is preferred over other brands by the children but not for consumption.*

**Keywords:** *Advergaming, Digital Marketing, Online games, Internet, Online marketing.*

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## 1. Introduction

Children constitute an important target market segment nowadays and this has prompted researchers & marketers to direct their attention to study the influence of marketing strategies on children. Children are attracted towards the strategies used by marketers to promote their products and it ultimately affects the buying behaviour of children. Changing technology, family structures, family income, purchasing power, parents' education etc are changing the parents and child's perspective of purchasing. In the modern media environment children usually spend most of their leisure time in playing games, watching TV, surfing on the internet which makes them more critical and knowledgeable, thus leading to changes in purchasing preferences and intentions. In the past the main commercial place to sell to children through advertisements is Television but the trend is now changed with the advancement of technology. The commercial sites are new marketplace for children which include advergaming, viral marketing, mobile ads, social

media marketing, banner ads on websites and product placements (A common sense media research brief 2014). Intensive digital marketing campaigns for fast food, snacks, and sweetened beverages combine an integrated set of digital practices designed to engage children and youth continuously. The six concepts that constitute unique features of digital media and marketing are Ubiquitous connectivity, Engagement, User-generated Content, Personalization, Social graph and Immersive environments. Advergame is also one of the emerging tools of digital marketing having all of the above characteristics.

## 2. Literature Review

Advergaming is the electronic games used to promote a product, brand etc available on company websites and on social media sites in which the commercial messages are present in the form of online games. Moore (2006) Advergaming is the game format in which advertising message, logos and trade character etc are embedded. Advergaming can be defined as "an immersive mix of

advertising and entertainment that takes the form of video games” (Obringer, 2007). Friestad & Wright, 1994). Research concluded that Children who play the advergame have the ability to recognise the persuasive character present in the game used to involve them in playing game.

Oanh H (2004), Pavlov & Stewart (2000) The study done on advergames proved that advergames has significant effect on young children than traditional advertising because it consists of colorful animated characters which involves the children and capture their attention for long period of time (Edwards, 2003). (Stuke, 2001) Research concluded that online games having commercial message in it results into better brand recall and positive word of mouth to generate high traffic and to achieve strong position in the market.

Advergames provided many benefits to advertising industry by creating positive emotional experience in the children. Advergames are the combination of brand and entertainment to attain the aim of higher traffic on brand websites along with the transfer of advertising message associated with the branded product (Grossman, 2005). (Cowburn and Boxer (2007) A study of food marketing promotions on Australian children related websites found that marketers promote products in the kid space and link them with the games, competition, prizes etc to attract children. As a result of exposure to the ad in game, positive brand attitude has formed as playing game is the main focus of attention at that time which ultimately leads to the feeling of association and evaluation in the child. Marketers use various tools to promote sales on their website in which children could participate such as sweepstakes, prize offerings to stimulate the behaviour of brand purchase, word of mouth etc (Moore & Rideout, 2007) Similar analysis of 119 food product websites and 196 websites on Australian children done by (Jones et al., 2008) (Henry & Story, 2009). A research analysis proves that advergaming are available on 85% and interactive content on 92% of websites. 55% of websites feature brand mascots, celebrities, cartoons and children who consumes that product along with colourful brand logo. Kids' clubs and online stores to purchase specific merchandise for the children. These all kinds of marketing techniques change the perception of child towards the product, build brand recognition, instils brand loyalty. Brand immersion is the main motive of advertisers to cultivate in children by use of advergames. In case of food marketers, several promotional strategies such as incentives, tie-ins, sweepstakes, contests are

used to enhance the brand value. Games are having at least one brand identifier to promote brand loyalty among the children. The interactive and changing features of Internet play a predominant position than television to influence children purchasing habits. An advergame is used to place the product in the minds of children (Culp, et al., 2010)

In a virtual world, product placement and product integration in the advertisement or game involves a character which promotes the product virtually in the marketplace. (Cain, 2011).

Advergames provides children the branded environment having fun experience (Bailey, Wise et al. 2009). These games are very effective in catching the attention of children because they are in long term contact with these games (Mallinckrodt and Mizerski 2007; Dahl, Eagle et al. 2009; Culp, Bell et al. 2010; Hernandez and Chapa 2010). They are argued to be influential as they are helpful in building brand memory and loyalty along with positive emotional bonding (Lee, Choi et al. 2009; Purswani 2010).

The games made by a firm with the objective to promote its brands. It is a virtual tool used by marketers having company logos or product images which involves user with the branded items by the method of playing. It is one of the digital marketing techniques often used by children for longer period of time and share fun experience to brand identification. It also has positive emotional investment reinforces the brand's credibility, and potentially motivates the young person to buy more products (Johnson, 2012). As a result of exposure to the ad in game, positive brand attitude has formed as playing game is the main focus of attention at that time which ultimately leads to the feeling of association and evaluation in the child. It also influences children's brand preferences towards product. Animated spokes-characters are typically large, colourful, action-oriented, and are accompanied by silly voices and sound effects. The character is often the focus of the commercial and is having attention catching ability related to the message. (Schumann, 2004) The ads containing favourite cartoon characters of children influence them and direct their attention to the product and develop a positive attitude towards product. These strategies are very effective in catching the attention of children because they are in long term contact with the online games. (Media mark Research & Intelligence 2007) The research conducted on 6-11 years old Children in the US proved that advergames are an important source to attract the

children in which brand is an essential part of game providing children with the branded environment rich in immersive and fun experience. (Bailey, Wise et al. 2009). It is also examined that these games are persuasive in nature and increase towards brand loyalty as well as memory towards the brand. (Lee, Choi et al. 2009; Purswani 2010). Marketers objective is to get the game message understandable by the player. So, they need to found out the specific characteristic of the game i.e. attractive and appealing to children. (Frasca, 2007).

### 3. Need for the Study

Advergaming is a new and emerging tool of Digital marketing used to entice adults and children to play in branded environments. There has been only very limited study exclusively children responses to playing games with advertising in the Indian context. Also less research appears to be done on influence of online games by evoking persuasive knowledge through web promotions in young children, and advergaming effect on the child's response to the communication. Hence an experimental study is required to determine the effectiveness of advergaming on young children on the basis of attention, recognition, association, liking, preference, intention and choice.

### 4. Objective of the research

The primary objective of the study is to determine the effectiveness of advergaming on young children on the basis of modified hierarchy of effects model. Modified Hierarchy of effects model is based on attention, recognition, Liking, preference, intention and choice to know the effect of advergaming on the behaviour of young children. The overall purpose of the research is to understand the relationship between advergaming and children.

### 5. Research methodology

The current study used a modified Hierarchy of effects model (Lavidge and Steiner 1961) to know the effectiveness of advergaming on young children and how their responses differ at various stages of the model. It consists of different steps such as attention, recognition, Association, liking, preference, Intention and choice. This modified model also introduced the concepts of cognition, conation and affect to explain the response to advertising

A qualitative research was conducted in the private computer classes in the Gurgaon region. The sample population consisted of controlled group of 15 children in the age group of 5-8 years who could use internet and could also respond to simple paper and pencil surveys. The advergaming used was called KFC kitchen which is available on website [www.kongregate.com/games/thanickk/kfc-kitchen](http://www.kongregate.com/games/thanickk/kfc-kitchen). This game was selected because of several factors; it incorporated the KFC logo, its character, the main product and the process of selling to customer which were central to the game. Children were then allowed to play game (about 5 minutes of play) and then questionnaire was provided to each child. The questionnaire consisted of six questions having colourful drawings and photographs as possible answers. We showed them similar looking characters and asked them to recognise the character they have seen during game playing. Then they were shown different types of fast food brands such as KFC, McDonalds, Dunkin donuts etc to check whether they are able to recognise the brand or not. After this children were asked to match the character with the product so as to check product character association. In the next question they were asked to point out the picture of the product they want to eat. Then each child brought into the room individually and let each child to select the product of his/her choice. There were no other brand advergaming available during this observation.

### 6. Research Findings

The findings of the present study provide additional understanding of the relationship between children and advergaming. While the earlier studies verified that message content in the game can be highly attention-getting and recognition building for young children. Children have varied preferences of favourite foods, and if asked to name their favourite, may simply reply with the last food they ate. These variations have led researchers and marketers to research on young children's preferences on the grounds of attention, recognition, association, liking, preference, intention and choice.

Attention- The games containing favourite cartoon characters of children influence them and direct their attention to the product and develop a positive attitude towards product. These strategies are very effective in retaining the attention of children because they are generally interested in online games. In our study

majority (80%) of children spent full time in playing the game and very consistently they played the KFC Kitchen game which shows the maximum attention paid by children and were able to follow the background instructions given by spokes-characters. The music playing in the background was helpful in retention of the children for long time which is supported by Wartella and Ettema 1974) Watt and Welch 1983; Welch and Watt 1982). According to them animated spokes-characters are typically large, colourful, action-oriented, and are accompanied by silly voices and sound effects. The character is often the focus of the commercial and is having attention grabbing ability related to the message

Recognition-It can be classified into character and product recognition. When children were asked to recognise the character after playing the KFC Kitchen advergaming, it was found that nearly 75% of them recognised the KFC character very easily because of repeated exposure, it appears all the time on the tray in the game during preparation of food for serving to customers. Whereas in case of product recognition approx 80% of them remembered the product as in the game they had to grill the Chicken in grilling machine so as to complete the order of customers as soon as possible. Pictures, process followed during the game, Cartoon spokes character, and animated cartoons, celebrities etc invoke visual brand recognition (Henke 1995; Mizerski 1995) this experiment was similar to the experiment used in previous studies to measure children's knowledge of promotional intent (Donohue, Henke, and Donohue 1980; Macklin 1985).

Association and Liking -Product character association has been checked by asking the children to match the product with the character. Only 60% of children were

able to associate the character with the product i.e. KFC Character with Grilled chicken whereas rest of them were confused. Brand associations are created by advertisers with the use of endorsements by animated brand icons and play an important role in children buying process. (Priya, Baisya, & Sharma, 2010)

## 7. Product Preference

Advergaming are very popular with children which influence children's brand preferences.

These findings suggest stronger effects of playing the advergaming on preference of product. Almost 60% of the Children just after playing the game want to eat the product shown in the game when they asked to. KFC is the brand which is now preferred over other brands such as over McDonalds, Dunkin donuts etc by the children for consumption. There is evidence to suggest that promotion, affects children's preferences.

## 8. Intention and Choice

Children were asked to select the brand of their choice from various brands shown to them by showing pictures and by asking the question "Are you going to ask your family to buy KFC Grilled Chicken" just after game playing. Nearly 60% of children selected KFC as a brand from various ones and rest of them didn't like chicken and not want to buy the KFC Grilled Chicken for them.

However when after 15 minutes the researcher asked the children "lets order some food" most of the children gave their preference for McDonalds or Dominos or the local brand Nirula. This was a little contrary to the expected response.

**Table-1: Responses of children and Outcomes**

Outcomes	Responses	Responses
Attention	Approximately 80% of children played full game of 5 minutes which shows maximum attention paid and most of them remember the sound played in the background of game.	Nearly 20% of them left the game playing in between which shows disinterestedness and minimal attention paid by children
Character Recognition	Nearly 75% of children recognised the character shown in game correctly	Approx 25% of them were not able to recognise them correctly.
Product recognition	Nearly 80% of children remember the product (Chicken) and recognised it easily.	Rest 20% were recognised it incorrectly
Character-Product Association	Nearly 60% of children were able to associate the character with the product i.e. KFC Character with Grilled chicken	Rest 40% were not able to match character and product with each other.
Product preference	Out of 15 only 9 children preferred KFC Chicken as a product	Four children prefer to have McDonalds and two of them prefer to eat Dunkin donuts
Intention and choice	Nearly 60% of children selected KFC for buying the product	Rest approx 40% of children select other brands for buying



## 9. Conclusion

There have been many studies which state that advergames are successful in building buying intentions of children and instilling brand loyalty among children (Henry & Story, 2009). Advergames persuade children to buy the product along with the development of critical evaluation and consumption skills (Acuff and Reiher 1997; Guber and Berry 1993). However this experimental study shows that though children might show “Attention, Recognition, Association and Response all this might not result in “Action”. This is also strengthened by (Chiou, et al., 2008) which insist on hybrid advertising where brick and mortar is as important as the clicks. In fact both the mediums should compliment and strengthen each other rather than substituting each other. The limitation of the study is that sample size is very small and age differences of children are not considered during an experiment. Hence, the results should not be generalized.

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## Appendix Questions

(After playing KFC kitchen game on the internet)

Attention-Time spent, how consistently the game was played, Audio-Visual effects

### Character recognition

Q.1 Please point to the characters you have just seen during game playing.



### Product recognition

Q.2 Please point on to the product you just saw during game playing?



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### Character product association

Q.3 Can you show me which product goes with which character

### Product preference

Q.4 Point out to the picture you would want to eat now?

### Intention

Q.5 I need you to tell me which product you want me to bring for you.

### Product choice

Q.6 Which product would you select for yourself from the following?



Are you going to ask your family to buy this product?

- a) Yes
- b) No

