Prospects of Online Advertising and its Implications on Children

Mohit Sharma[1], Rajnish Kumar[2]

[1]Amity School of Communication, Amity University Uttar Pradesh, Lucknow
[2]Amity Institute of Biotechnology, Amity University Uttar Pradesh, Lucknow

--***--

Abstract - *Online advertising and its effects on children is perhaps one of the most talked about topics in recent times not because of the fact that children are vulnerable to the products advertised but the fact is these have both positive and negative effect on them. If on one hand critics feel that advertising is part of life and children need to understand and learn in present consumer socialization process, on the other hand it is argued that such advertising posed harmful effects especially among children of below 13 years. Parents certainly need to play a cautious approach so that children are protected from undesirable effect of various forms of advertising. According to projects there were 3.58 billion internet users till March 2017 out of the 7.55 billion people (world population) and the number of internet users will raise to 57.5% by the end of year 2020. The current spend on digital advertising is 229.25 billion USD in 2017 which is projected to escalate to 335.5 billion by the year 2020. The future projections clearly indicate that websites will be flooded with online advertisements. The companies and sellers have acknowledged the speedy growth of the Internet in the world and appreciated the online media for marketing of products and services. FMCG sector is ruling the roost with major contribution of online marketing share. In addition, Digital marketing has proliferated in diverse regions like e-commerce, telecom, real estate and education. The current paper reviews the real boost in online advertisements which has enabled the companies a global outreach to advertise their products and services. In the current era of online advertising to boost business its unwarranted exaggerated effects have been analyzed and various factors explained.*

*Key Words***: Advertisement, Children, Digital Marketing, Internet, Online Medium*

1. INTRODUCTION

It took years and lot of creative efforts for advertisements to evolve and sell efficiently. From ancient civilizations to the current one, the world has witnessed advertisements changing numerous forms. With the passage of time, some of the ancient formats of advertising such as stone and steel carving became obsolete while some came up stronger than ever. Today, advertising has evolved into a complex communication phenomenon. The most recent and the most talked about is 'Online Advertising'. The technological advancements, especially internet,have provided a significant boost to the advertisement fraternity. Online medium has been adopted by the companies as a robust tool for communication of advertisements. The companies have very well acknowledged that the internet has taken the 'mainstream' and this is evident from the fact that the medium is used by more than 50 percent (as in 2017) of the world's population (www.internetworldstats.com). To capture this half-world, advertisers are significantly diverting their advertising proportion towards online medium. They are targeting everyone whoever is using this medium. Children and adolescents are no excuse. It has been reported that at least 26% of the internet using population fall below 20 years of age (statista.com 2014).

Jean Piaget, Psychologist (1936),has critically explained,as how a child constructs mental model of this world. In his theory of cognitive learning, he had mentioned that generally a child doesn't attain the cognitive development stage, until the age of 11-years.The younger ones are more susceptible to hazards of Information and Communications Technology (ICT) as it is seen and also reported that kids get fascinated towards interactive gadgets like desktop computers, mobiles, websites, even before reaching the age of 3-years.There is no doubt that an early exposure to ICT benefitschildren through smart teaching and learning process, but contraryto this, it also poses certain detrimental effects as well. One of the massiveeffectsis laid down by the embracing world of advertisements.

Whether children, adolescents or adults, todayadvertisements are all around us. We are bombarded with advertisements several times a day, by various means. Advertisements take us into the world of fantasy. They make us feel inferior. Right in front of us, they yell so loudly that we don't have 'enough' in our lives. Still we handle it all. We are adults. We know how to react to these advertisements. We think critically and analyze each and every word written (or said) in advertisement and then take a logical action. What about the children?

Livingstone et al. (2014) have found that two out of three children in Europe have direct access to internet. With such a massive penetration of internet into the lives of children it is not practical to restrict children from computers nor can we put a regulation on advertisers barring them to advertise for children. What we can do is to find out some ethical ways to advertise

for children so that these may not affect them adversely. The current study is focused on identifying and review of such ethical ways and standard practices to keep children away from the negative effects of online advertising.

The number of internet users is increasing day by day and so the number of child users (below 18 years)is also growingcorrespondingly. The increased internet access is introducing both positive and negative effects. And, one of the detrimental effects emerges from the advertisements carried in online medium. With the increased internet usage, the range and volume of advertisements is also growing exponentially. The internet users are bombarded with several advertisements everyday and the reaction of children, in particular, towards these advertisements is also in coherence with their age.It is evident that exposure of children to the online system provides opportunities to explore their multidimensional knowledge but we cannot ignore the side effects emerging from accessing internet and subsequently viewing online advertisements. With every passing day, the advertising agencies derive new ways to grab the attention of online users to drive their services forward. The advertisement skills, content and the targeted age-group pose as significant factors on the success rate. Moreover, care must be taken by the advertising agencies to consider the detrimental effects on the targeted audiences, especially the children.

2. BACKGROUND

In the year 1989, Timothy Berners-Lee introduced World Wide Web and revolutionized the communication system of the world(Berners-Lee 1996). The invention of internet not only facilitated information sharing but also provided an enormous opportunity for advertising industry to venture into the new medium of online advertisement. It did not take too long for advertisers to acclimatize to the new medium and very soon advertisements were seen overflowing throughout the web. During the course of development of online advertisement almost all sections of society were covered by the advertisers. Apart from adults, children have always been easier targets for advertisers and ever since introduction of online advertisements,focus shifted more towards them. This comes as a result of augmented ICT usage among children both at home and in schools. Since the inception of internet, children's screen time has increased manifold. It has been noted that boys generally stroll on internet to play games and girls for communicating with others (Subrahmanyam et al. 2000).Though children mostly surf internet alone; it has been reported that modest and judicious use do not negatively impact them. It, in fact assists them to sustain interpersonal communication and build up social connections. However, excessive use and over-exposure can certainly have unfavorable effects on children and adolescents (Subrahmanyam et al. 2001). Orleans and Laney (2000) in one of their significant studies challenged the conception that heavy ICT use makes children socially isolated and concluded that internet improves their interpersonal skills and social relationships, instead.
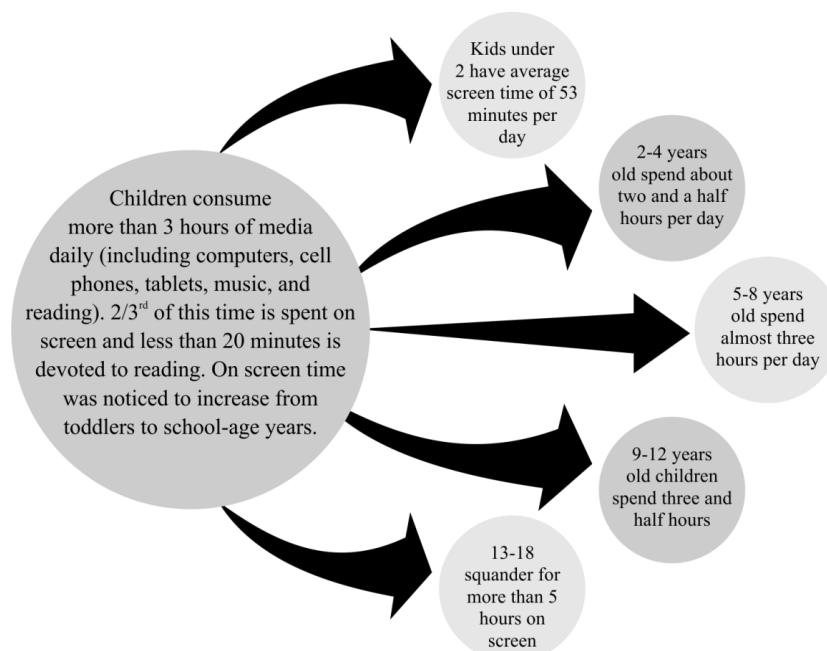

Fig -1: Children screen time in school age years

Though the internet may be helping in improving the social status of children, the overdose of social networking sites expose them to the hazardous world of advertisements as it has been found that a good number of children are using such web bases (Facebook, Twitter, Linkedin, etc.) at a very tender age (Barbie Clarke, Marc Goodchild and Andrew Harrison 2010).

From information sharing to social networking and alsoto online gaming, children are exposed to advertisements in every sphere. Today, online gaming has become an integral part of the digital culture. Adults or children, playing online games are the latest trending pastime for everyone. As per Brian Sutton Smith(1986), the historical nature of 'playing' has been playing with others and not with objects and devices. Time has moved. The definition of 'playing' has changed. Now, children are devoting comparatively lesser time 'playing with others' than before. They are often found indulged in online gaming. Noticing the trend, the companies made a smart move. They pioneered 'Advergames',video games carrying advertisements. While some companies introduced advertisements in popular video games, others created special games for the sole purpose of promoting and marketing their products and services. The invention of cost-effective advergaming, made it an imperative part of companies' marketing plan (Hofmeister-Toth and Nagy 2011). Several other research studies have reported that advergames are very much prevalent now-a-days especially on websites that are popular among children. The studies have also reported that advergames are generally successful in catching the attention of young minds. Advergamingis successful in attracting children as the younger ones are found to be particularly susceptible toaffective communication (Van Reijmersdal, Rozendaaland MoniekBuijzen 2012). However, it has been talked about that everything depends on the children's perceptiveness of advertisements. They need to learn and understand what advertising is and how it functions in video games and various websites. Brian Young (1986; 1990) has emphasized upon children acquiring 'advertising literacy'.

Calvert (1999) studied the robustness of media in education and highlighted its implications on children. The study is indicative of the fact that influence of media on children is very complex and simplistic approaches must be avoided. Initially, advertising for children meant limited print ads in child magazines or a 20-second clip on television. But with internet in full swing, the possibilities are endless. American researcher, Montgomery (2012), has supported Calvert that it is really an intricate process to assess and determine the impact of online advertisements on kids.Moreover, the animated online advertisements also have both positive as well as negative impacts. These animations, on one hand can positively enhance child's cognitive skills, but on the other hand they can limit reading and comprehension of children with lower self control (Holmberg 2016).In a comprehensive study through developmental model, Valkenburg and Cantor (2002), explored various age groups of children and explained that how children become consumers.In the first model they studied zero to two years old children, where they concluded that in-spite of preferences and desires, this age group is not yet true consumer. While in the second model, age group of two to five years, authors found that children start asking questions and demand certain products. However, this age group child, still do not understand the persuasive intent of commercials. This model of children is very sensitive to the commercial advertisements. In the third model authors considered an age group of five to eight years old children. These children start distinguishing between real and virtual. They start deviating from the parents' will and prefer the independent choices towards the advertisements and purchasing habits. In the final model authors studied age group of eight to twelve years old children and concluded that the children have distinct opinion about the advertisements and their emotional quotient considerably improves. At this stage their interests and hobbies influence the assessment towards online advertisements.
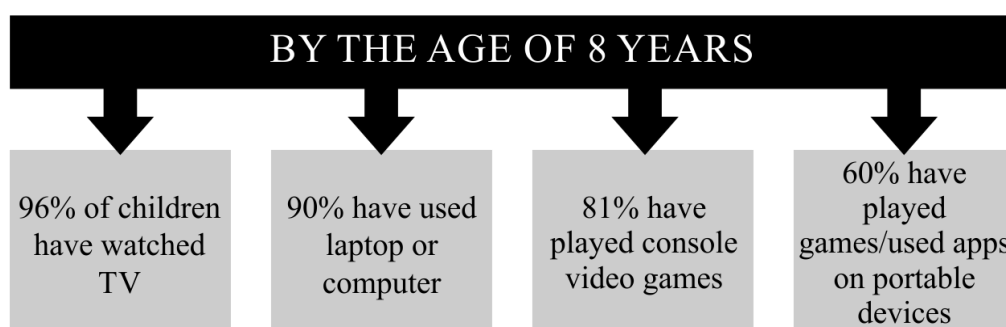

Fig -2: Exposure of children (0-8 year old) to televisions and computers

In one of the potential researches, Young (1990) reported that there are a numerous factors which influence the affinity of children and teens towards purchasing certain items. However, some of the factors antagonize such influences. It seems that peers and parents have greater contribution in enhancing the influence of advertising, or in some instances decreasing its influence. In an independent study, Malamud and Pop-Eleches (2010) found that families, where mothers stay in the house and there are rules regarding use of internet, the detrimental effects of internet advertisements are greatly reduced.It is definite that use of internet in adolescents will further increase with years to come. Time spent online now-a-days is more than it was used earlier playing outdoor games or doing other health related activities (Mills 2014). One of the major challenges with parents is to monitor media use and handle the curiosity of the child in such a way that negative effects get well overshadowed by the positive ones. If the children are overexposed to the online media and advertisements, cost of ignorance by the parents/caretakers could

be enormous (Villani 2001).All the children do not receive equivalent protection from the undesirable effects of online marketing. This might be due to the fact that regulations to control the advertisement towards children vary from country to country and parents apply different methods to limit their wards from the online activities (Jourova 2016). Parents and families need to discuss and explore the educational values of the advertisements. Children should be motivated to critically analyze the media and they must get assistance from the parents to differentiate between reality and fiction, especially when it comes to violence, sex and discrimination in the online advertisements. It has been found that younger kids find it difficult to analyze the difference between content and advertisements. It has been reported that children under 8 years of age do not have skills to understand the ultimate intent of online advertisement due to lack of cognitive development (Calvert 2008).

Several measures have been suggested to keep children at bay from the peril of online advertisements. One of these measures can be restricting the use of computers and televisions in children's room or bedroom. A central location for keeping these equipments should be preferred and ensured. On the other hand, the older children must be provided with the scheduled plan in advance to explore the internet and thereby enabling them to make their own wise choices towards various advertisements. The children should be disciplined enough to maintain the same rules even in the absence of family members (Chele et al. 2005). In one of the most recent studies, Reijmersdalet al. (2017) emphasize on the excessive use of profile information of the children to target them for establishing the brand values and boosting the purchase intentions. As children are noncritical in analyzing the advertisements, they could not perceive about being targeted by advertisement agencies. The advertisers strategically design and place the advertisements throughout the webpage in such a manner so as to misguide and confuse the little ones (Caiand Zhao 2010). Livingstone and Helsper(2006) performed a comprehensive review on the media advertising literacy. Their review suggests that the in-spite of increase in media advertisement literacy among the children, the effect of ads have not reduced. Environment around a child is another influencing factor which governs his attention towards an advertisement. In one of the research works, Wulfemeyer and Muller (1992)reported that the students of California, Washington, Massachusetts and North Carolina schools paid very low attention on advertisements and preferred to talk and joke among each other. It clearly indicates that surroundings play a vital role in influencing the non-cognitive brain of a child towards influence of an advertisement. The study conducted by the authors was found coherent with the psychological theory from Jean Piaget(1952).In another study, Bjurstrom (1994) emphasized on the process of interpretation of messages conveyed by advertisers to the children. The American center for media education speculates in their report 'Web of Deception' that ad agencies and internet product promoters violate the privacy of children and manipulate their thoughts apart from obvious exploitation through porn content (Griffiths 1997).Moreover, these websites contain advertisements that carry malicious software and viruses with them. If clicked once, even by mistake, the retargeting cookies will bring such harmful content from all over the world to child's webpage. Halfordet al. (2004) conducted a study for lean, over weight and obese children. This study concluded that the obese children recognize significantly more food advertisements on television in comparison to the lean ones. Epsteinet al. (2008) concluded that decrease in internet usage and TV watching may play a vital role to minimize the state of obesity and draw the attention of children towards physical activities. Later, Sandberg (2011) in one of her researches focused on teenagers and food advertisements found that they have a thorough understanding of internet ads and have developed tactics to steer clear of from them. It's not only food and beverages ads but alcohol industry also poses harmful situation for children. Although, such advertisements are limited and censored in most of the countries but for the remaining they are definitely a risk. Also, they lure the public through surrogate advertising. It is reported that as less as 30% of alcohol industry audience is underage (Kunkel 2012).

The internet is growing everyday and so will be its impact on the society. It will create numerous positive and negative effects. There are chances that with the advancement of technology and the increasing dependency, children and adolescents will live their lives all alone with an interactive gadget (Ohannessian 2009). However, Jackson, Eye and Biocca (2003) have stressed the need of more research to maximize the benefits of internet into the lives of children so as to increase their academic outcome.

3. DISCUSSION

Advertisements are omnipresent and affect almost every facets of life. As per a survey report by Statista Inc. there are 3.58 billion internet users (till March2017) out of the 7.55 billion people (world population). This clearly shows that just about 47.4% of the world's population is using Internet by the year 2017. It is projected that the total number of internet users will become 57.5% by the end of year 2020 (eMarketer 2016). The current spend on digital advertising is 229.25 billion USD (year 2017) which is projected to escalate to 335.5 billion by the year 2020. This indicates that websites are going to be flooded with online advertisements in coming decades. The companies and sellers have acknowledged the speedy growth of the Internet in the world and appreciated the online media for marketing of products and services. FMCG sector is ruling the roost with major contribution of online marketing share. In addition, Digital marketing has proliferated in diverse regions like e-commerce, telecom, real estate and education.

Evidently, advertisements are essential for current business forms; however, they pose certain unintentionalinfluenceon the individuals, especially children. The over-promising advertisements at times severely influence the immature minds of kids and force them to develop imaginary and virtual belief for projected products. The excessive use of emotional concepts while advertising a product or service seems to misguide the kids and force them to become emotionally more susceptible. The advertisements have the potential to manipulate the opinions, values and attitudes of soft psychology of children by continuous production of images of their products and services. Children often find the advertisements in such a way that agreeing upon will buy them happiness and develop immediate or short-term desire to acquire the products and goods. To full-fill such desires the middle class parents/guardians are dragged to purchase out of the budget stuffs and accept inevitable financial burden. On the contrary, avoiding such desires may inculcate rowdiness in the children and lead to revolt and become short tempered. The advertisements influence the dietary habits and choices of children which imparts demonstration effects.
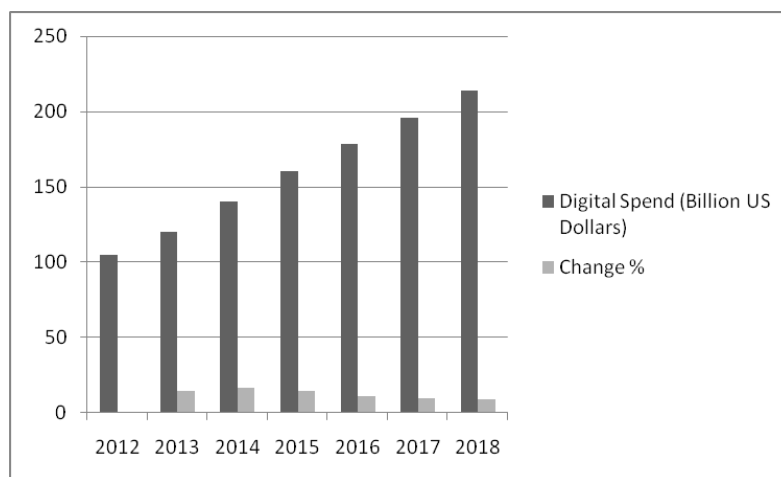

Fig -3: Indicates that worldwide digital spend growth has significantly increased in last six years

The Parental restrictions and control on the browsing activities of the children seem to bemost convenient way to avoid the detrimental effects of online advertisements. The child should never go online unaccompanied. The early education to differentiate the main content and unwanted advertisements will enable the children to avoid any misguidance. It has been observed that a disciplined routine by parents such as limiting the browsing time frame and use of headphones, watching together etc may reduce the unwarranted effects of ads on the children. If parents have a vastly busy schedule, provision of granting less permissions to the browsers and filter-out methods using kids-browsers or child lock can be a feasible option. The studies reported that food and beverage advertisements both online and on televisions have great impact on children and adolescents (Halford et al. 2004; Epstein et al. 2008). More in-depth research is needed to reveal the effects of such ads on dietary preferences and habits of children. There is also a need of understanding and practicing healthy food advertising that may divert children attention from advertisements of unhealthy food products. Parents and guardians should also appraise their wards about good and bad food choices.

Strict regulations for online advertisers by the government or private agencies or commissions must be framed to control and scrutinize the time frame of advertisements targeted towards children. These should also restrict their frequency and put a watch on the content of such advertisements. The metaphoric and imaginary ads must be controlled at the lowest level so that the psychology of immature brains of children could not be manipulated. Guidelines for commercial websites should be strictly implemented.

Awarenessabout good and bad advertisements among children at the preliminary school levels are need of hour for ever expanding plethora of advertisements. A pilot study conducted by Wollslager (2009) suggests that 23% of children under investigation can understand the purpose of the embedded ads in online gaming. However, after media awareness training sessions their percentage increased to 33%. This study supports the need of an early awareness among the children about online advertisements. Further, emphasis on physical activity based games to minimize or avoid online gaming is an important prerequisite for overall growth of the kids. Children should not be provided with free hand to urge for whatever they see on advertisements. Purchasing habits of the parents must not be driven in the influence of advertisements and children's will. Children follow their heroes blindly and want to mimic and act like them. It is the collective responsibility of celebrities to judiciously select the ads they appear in. Also, it is social accountability of agencies not to project the unreal superheroes in the advertisements such that it generates false belief among the children.

Advertisement carrying mediums such as websites, movies, serials etc have to understand their ethicalresponsibilitytowards the society as a whole and particularly children so that the negative effects can be minimized. Profile sharing of the users without their consent should be prohibited. The privacy norms violations need to be restricted in the quest of higher profit making. Retargeting advertisements must be prohibited in case of children. Although Google has prohibited the extraction of personal information and personalized advertisement for the children below 13 years, but it will be generous if this age limit is further increased. Moreover, all websites must apply this prohibition in coherence to the Google.

4. GAPS AND FURTHER RESEARCH

Despite the availability of large number of research works on the impact of advertisements on children, very few studies have focused on the effects of online advertisements. No doubt that internet is growing speedily and so is the children's access to it. The researchers are struggling to catch up the pace of new trends and technological advancements. What is prevalent today becomes obsolete next day and hence, the academic literature often depicts a general trend rather than a specific outcome. Children's online activities change with their age and cognitive development and their perception towards digital advertising also changes day-by-day with age (Brady et al. 2008; Rideout, Foehr and Roberts 2010).More focused research is needed to relate the technical progress, online exposure and understanding of advertisements with different age groups of children. Long term research shall be conducted to assess the real time impact so as to bridge the gap between marketing strategies and academic studies.

Girls are different from boys and so is their perception towards advertising. The further studies are suggested to peep into the impact of online advertising according to gender differences. The studies can also specifically focus on inappropriate advertisements and most vulnerable age groups of children.

5. CONCLUSION

Undoubtedly, the online advertisements have been a real boost for micro to large scale industries. It has enabled the companies a global outreach to advertise their products and services. Where,on one hand, the world of internet advertising is benefitting some; on the other hand, it is making others vulnerable.Its adverse effects especially on children cannot be ignored. Parental control, strict guidelines for advertising agencies, general awareness about advertisements and ethical responsibility of both the society and the industry towards children are vital to overcome their disadvantageous effects. The online system has opened a new era of business advertisements but its unwarranted exaggerated effects must be analyzed and taken care properly.

REFERENCES

[1] Berners-Lee, T. J. 1996. WWW: Past, Present, and Future, in IEEE, Computer Magazine, 29 (10), 69–77.

[2] Bjurstrom, E. 1994.Children and Television Advertising,Karlstad: Swedish Consumer Agency.

[3] Brady, J., Farrell, A., Wong, S.&Mendelson,R. 2008. Beyond Television: Children's Engagement with Online Food and Beverage Marketing.Clinical Medicine: Pediatrics, 2, 1-9.

[4] Cai, X. &Zhao, X. 2010. Click Here, Kids!.Journal of Children and Media,4(2), 135-154.

[5] Calvert, S. L. 1999.Children's Journeys through the Information Age, Boston: McGraw Hill.

[6] Calvert, S. L. 2008. Children as Consumers: Advertising and Marketing.Spring, 18 (1),205-234.

[7] Chele, G., Macarie, G., Chirita, R., Ilinca, M., Stefanescu, C.,Chirita, V. &Andrei, P. 2005. Effects of the Computer Use for Children and Teenagers from Romania. 4th WSEAS International Conference on E-Activities, Miami, Florida, USA, 94-99.

[8] Clarke, B., Goodchild, M.&Harrison A. 2010. The digital world of children and young adolescents: Children's Emotional Engagement with Digital Media. ESOMAR Congress 2010 - The changing face of market research, Part 2 / The Conversation Revolution: Brand and People Dialogue.

[9] Epstein,L. H., Roemmich, J. N.,Robinson, J. L., Paluch,R. A., Winiewicz,D. D.,Fuerch, J. H., &RobinsonT. N. 2008. A Randomized Trial of the Effects of Reducing Television Viewing and Computer Use on Body Mass Index in Young Children.Archives of Pediatrics & Adolescent Medicine,162 (3),239-245.

[10] Griffiths, M. D. 1997. Friendship and Social Development in Children and Adolescents: The Impact of Electronic Technology.Educational and Child Psychology 14, 25–37.

[11] Halford, J. C.G., Gillespie, J., Brown, V., Pontin, E. E.,&DoveyT. M. 2004. Effect of Television Advertisements for Foods on Food Consumption in Children.Appetite, 42, 221-225.

[12] Hofmeister-Toth, A.,& Nagy P. (2011). The content analysis of advergames in Hungary.Qualitative Market Research: An International Journal14(3), 289-303.

[13] Holmberg, N. 2016. Effects of Online Advertising on Children's Visual Attention and Task Performance During Free and Goal-directed Internet Use: A Media Psychology Approach to Children's Website Interaction and Advert Distraction.Available at https://www.lunduniversity.lu.se/lup/publication/f8c12896-b789-4394-b9cd-1cece113fb08 (Accessed on September 21, 2017).

[14] Jackson, L. A., Eye, A., &BioccaF. 2003. Children and Internet Use: Social, Psychological and Academic Consequences for Low-income Children, Does Using the Internet Affect Children's Development? Psychological Science Agenda,17(2).Available at www.apa.org/science/about/psa/2003/12/jackson.aspx (Accessed on October 5, 2017).

[15] Jourova, V.2016.The Impact of Online Marketing on Children's Behavior.Justice and Consumers.Available at www.ec.europa.eu/consumers/consumer_evidence/behavioural_research/docs(Accessed on September 22, 2017).

[16] Kunkel, D., &CastonguayJ.S. 2012. Children and Advertising: Content, Comprehension, and Consequences.In Dorothy G. S.,& Singer,J. L. (Eds.),Handbook of Children and the Media (395-418).Los Angeles: Sage.

[17] Livingstone, S., &Helsper, E. 2006. Does Advertising Literacy Mediate the Effects of Advertising on Children? A Critical Examination of Two Linked Research Literatures in Relation to Obesity and Food Choice.Journal of communication,56 (3),560-584.

[18] Livingstone, S., Mascheroni, G., Olafsson, K.,& Haddon, L. 2014. Children's Online Risks and Opportunities: Comparative Findings from EU Kids Online and Net Children Go Mobile.EU Kids Online, London School of Economics and Political Science, London, UK.Available at www.eukidsonline.net (Accessed August 11, 2017).

[19] Malamud, O.,& Pop-Eleches, C. 2010. The Effect of Computer Use on Child Outcomes.Harris School of Public Policy.Retrieved from http://www.voxeu.org/index.php?q=node/5321

[20] Mills, K. L. (2014). Effects of Internet Use on the Adolescent Brain: Despite Popular Claims, Experimental Evidence Remains Scarce.Trends in Cognitive Sciences,18 (8), 385-387.

[21] Montgomery, K. C. 2012. Safeguards for Youth in the Digital Marketing Ecosystem. In Dorothy G. S.,& Singer,J. L. (Eds.),Handbook of Children and the Media (pp. 631-648).Los Angeles: Sage.

[22] Ohannessian, C. M. 2009. Media Use and Adolescent Psychological Adjustment: An Examination of Gender Differences.Journal of Child and Family Studies,18(5), 582–593.

[23] Orleans, M., & Laney M. C. 2000. Children's Computer Use in the Home: Isolation or Sociation? Social Science Computer Review, 18, 56–72.

[24] Piaget, J. 1936.Origins of Intelligence in the Child. London: Routledge&Kegan Paul.

[25] Piaget, J. 1952.The Origins of Intelligence in Children. New York: International Universities Press.

[26] Reijmersdal, E. A. van,Rozendaal,E., &BuijzenM. 2012. Effects of Prominence, Involvement, and Persuasion Knowledge on Children's Cognitive and Affective Responses to Advergames.Journal of Interactive Marketing,26(1),33-42.

[27] Reijmersdal, E. A. van,Rozendaal, E., Smink, N., Noort, G. van,&BuijzenM. 2017. Processes and Effects of Targeted Online Advertising Among Children.International Journal of Advertising,36 (3), 396-414.

[28] Rideout, V. J., Foehr, U. G.,& Roberts D. F. 2010. Generation M2: Media in the lives of 8 to 18 years olds.Kaiser Family Foundation. Menlo Park, CA.

[29] Sandberg, H.,Gidlof, K., &HolmbergN. 2011. Children's Exposure to and Perceptions of Online Advertising.International Journal of Communication,5,21–50.

[30] Subrahmanyam, K., Kraut, R. E., Greenfield, P. M., & Gross E. F. 2000. The Impact of Home Computer Use on Children's Activities and Development.The Future of Children,10(2), 123-144.

[31] Subrahmanyam, K., Greenfield, P. M., Krautc,R. E., & Gross, E. F. 2001. The Impact of Computer Use on Children's and Adolescents' Development.Applied Developmental Psychology,22, 7-30.

[32] Sutton-Smith, B. 1986.Toys as Culture. New York: Gardner Press

[33] Valkenburg, P. M., & Cantor,R. J. 2002. The Development of a Child into a Consumer.In Calvert, S. L., Jordan, A. B., & Cocking, R. R. (Eds.), Children in the Digital Age: Influences of Electronic Media on Development (61-72).Westport, Connecticut: Praeger.

[34] Villani, S. 2001. Impact of Media on Children and Adolescents: A 10-year Review of the Research.Journal of the American Academy of Child and Adolescent Psychiatry, 40(4), 392-401.

[35] Wollslager, E. M. 2009. Children's Awareness of Online Advertising on Neopets: The Effect of Media Literacy Training on Recall.SIMILE:Studies in Media and Information Literacy Education,9(2), 31-53.

[36] Wulfemeyer, K. T.,&Muller, B. 1992. Channel One and Commercials in Classrooms: Advertising Content Aimed at Students. Journalism Quarterly,69 (3), 724-742.

[37] Young, B. M. 1986. Children's food choices, parents understanding and influence, and the role of food promotion.In Ward, S., Robertson, T. S., &Brown, R. (Eds.), Commercial Television and European Children: An international research digest.Aldershot, London (UK), Gower.

[38] Young, B. M.1990.Television Advertising and Children, Oxford: Oxford University Press.