

Preliminary communication
(accepted January 30, 2019)

EXPOSURE AND USE OF MOBILE MEDIA DEVICES BY CHILDREN: CHALLENGES AND IMPLICATIONS

Ljupka Naumovska¹
Gordana Serafimovic
Ljupco Efremov

Abstract

The children's influence on the parent's buying behavior as well as on the family budget was neglected in the past. In today's modern lifestyles, dominated by technological devices and digital media, children are greatly exposed to ads and messages that are fostering their eagerness for certain products and services. This aspect is even more urgent to consider, taking into account that children are exposed to digital media unattended and most of the time conditioned by their parents who are expecting certain behavior from them.

The study aims to examine the relationship between media exposure of children and spending habits of household with children. The results show that children of parents who use mobile device for conditioning spend more time on mobile devices compared to those children who aren't conditioned. This urges for action from parents and different stakeholders for balancing between exposure to screens and additional activities for the purpose of improving children's development and well-being.

Keywords: children, Generation Z, mobile devices, conditioning, household spending.

Jel Classification: M30; C22; C52; E24; I24; J29

INTRODUCTION

One of the most inevitable partners in the buying decision in the families nowadays is the child. Children have come to constitute a very important consumer group that influences family purchases of various products in many ways. Parents are protective and concerned about the well-being of their children; hence they try various options

¹ Ljupka Naumovska, PhD, Assistant Professor; Gordana Serafimovic, MSc, Teaching Assistant, University of Tourism and Management in Skopje; Ljupcho Efremov, PhD, Research Manager, Indago, Skopje, North Macedonia.

before making the purchase (Ramzy et al. 2012). Thus, recognizing children as a primary market, an influencing participant, and a future market, is the most obvious obligation of today's marketers (Arul and Vasudevan 2016). Nowadays, children have more autonomy and power within the families than in previous generations, so it follows that children are vocal about what they want their parents to buy (Ali et al. 2012). However, a set of challenging implications on the advertising market has raised attention when marketing to children is on the rise especially via digital media. Children and Gen Z is tech savvy and their exposure and use of media devices is increasing their awareness and need for products and services that are advertised. Furthermore, certain messaging based of fiction, fantasy and other abstract forms of communication with the market via digital media can be seen harmful for younger consumers, twisting their perception and rational perception.

Generation Z in a couple of years is going to become the largest generation of customers. It is well known that the Gen Z, children born after 2000, have different character and mindsets according to previous generations (Ozkan and Solmaz 2015). They are already the buying power in the world especially when we take into consideration the influence they have on household spending. The focus of the marketers is already on this generation due to the power they have in the market today, but at the same time the concerns are raised because of the parallel negative digital media influence mentioned above, reflected on increased household spending's under this influence. The communication process between the family members is inevitable due to the fact that children's' buying behaviors depend mainly on the family characteristics i.e. family communication process has considerable influence upon the consumption of a child (Rose, Boush, and Shoham 2002).

1. CHARACTERISTICS OF CHILDREN AS CUSTOMERS

1.1. Characteristics of generation Z

In family budget spendings, children mainly influence the buying decision only about the products, which are directly used by them. Factors affecting children's purchase requests to their parents and their parent's subsequent purchases for their children were freedom of a child's movements/behavior, product's visibility, child's gender, child's developmental stage, suitability of the good for consumption, strategy used in child's request, parent's income/family level and price of the good determine the number of purchases following a child's request (Ebster 2009).

Members of the youngest generations including children, babies and teens have many distinctive psychographic characteristics when observed as customers or advertising audience. To the reference of visuals, children have higher sensitivity on graphics and images in packaging and design than adults (Calvert, 2008). Children audience is particularly sensitive to bright colors and animated visuals. The youngest members of Generation Z (0–2 years old) show interest in jingles, animation, humor and sounds raised from female and children voices (Lemish 2007). Correspondingly, a child is more likely to remember a message where animations and mascots. Pre-school children (3–6 years old) are attracted by messages with marionettes having human characteristics, animation in

logical narratives (Lemish 2007) as well as with fantasy elements, sky–fy and heroes. Playing computer games and chatting on the Internet are the most favorite relaxation activities of all members of Generation Z, and by this fact they become an available target group for viral marketing and on line product post (Sramova, Dzupina, and Juraskova 2013). All these factors are directly increasing children’s desire for products and services, hence their influence on family budgets.

To the reference of the direct money that children spend and the money spending they influence, children also represent a third major market (Cardona 2004). Advertisers recognize that brand loyalties and consumer habits that are created when children are young and vulnerable will further on be carried through to adulthood, which is clear assumption of the greater impact advertising and media have over children value’s system nowadays (Calvert 2008).

From age one, children are accompanying parents and observing when taken with their parents to stores so they can observe the displayed products.

Since age of two, children are accompanying parents and requesting for things that they see and make connections between television advertising and store product offers. They pay more attention to advertising messages, develop associations and the list of things they want increases.

From age three, children are accompanying parents and already selecting goods with permission, but making their own choices. They are able to recognize brands and locate goods in the store (Roberts, Foehr, and Rideout 2005).

At this stage, the child has developed associations, from advertisements to requirements, to stores, to displays, to designs, to retrieval of want-satisfying products. For many parents this is a pleasing experience, signaling the beginning of the child's understanding of the want-satisfaction process in a market-driven society (Alvy and Calvert 2008).

When children become four years old, they play other role: Accompanying Parents and Making Independent Purchases. The final step in their development as a consumer is learning to pay for their purchases at the counter. From age five they are going to the Store Alone and Making Independent Purchases.

Although the kinds of products marketed to children have remained much the same, the buying power of children and adolescents has increased rapidly. Further more, children nowadays shape the buying patterns of the family. The wealth of today’s children has made youth a market eminently worthy of interest by companies (Calvert 2008).

Young children also use animistic thinking, believing that imaginary events and characters can be real. For instance, during the Christmas season, television is flooded with commercials that foster an interest in the toys that Santa will bring in his sleigh pulled by flying reindeer. Young children accept these imaginations and the consumer culture they represent. Preoperational modes of thought put young children at a distinct disadvantage in understanding commercial intent and, thus, in being able to make informed decisions about requests and purchases of products (Valkenburg and Cantor 2002).

One of the most frequently cited studies providing a basis for designing web- sites for children (ages 3–12) specifies the developed skills relating to the search on the Internet in older children (over 6 years of age), while revealing all kinds of complications for the younger ones (Nielsen 2010). This demonstrates the need to treat children in the narrow

age groups as distinct target groups with specific requirements, including at least the division into: young (3–5), mid-range (6–8) and older (9–12) children (Nielsen 2010). Moreover, through age 7, children are also honing their fine-motor skills, which makes it gradually easier for them to manipulate touchscreens, small keys, gadgets and controllers. (Nikken and Schols 2015). Having improved their skills, 5–8 year old children have developed a distinct preference for educational games or games that foster competition, because these content types match their developmental status (Priewasser et al. 2013).

School children also pay attention to the content that allows them to build self-esteem through positive reinforcement. Growing physical, cognitive and psychosocial competencies allow more extensive exposure to Internet. Because of the experience in using the Internet, they often already have sufficient motor skills. However, regardless of how much time they spend on the Internet (which is the best predictor of how they use web sites) (Nielsen 2010), children still do not understand the commercial nature of advertising content.

1.2. Advertising on the Internet

The debate surrounding the ethics of advertising to children generally centres on the age at which children have developed sufficient cognitive resources both to understand the persuasive intent of marketing messages and to critically evaluate them (Nairn and Fine 2008). Although television is still the dominant venue for advertising, marketers are exploring new ways to market to children and adolescents through online media and wireless devices, often using stealth techniques whereby consumers are immersed in branded environments, frequently without knowing that they are being exposed to sophisticated marketing campaigns (Calvert 2008).

The ads on web are integrated with the other content of the Internet site which is designed to keep the children captivated in play for hours involving even a product "spokes characters" to network with the children and develop relationships with them so that long lasting brand loyalties can be developed (Calvert 2008). The basis for these actions by marketers is to establish relationships, which require the understanding of child's perceptive system and emotions.

In addition, on the Internet the personalization of marketing actions is often possible due to the possession of personal data and monitoring the behavior of children (Davis 2002) – and then adjusting the message to their experiences and development opportunities can be eased for advertisers (Budzanowska 2015).

2. THE FINANCIAL ASPECTS OF ADVERTISING TO CHILDREN

Parents experience a lot of financial problems and they are associated with negative views on media effects, the presence of older siblings living at home and occur especially when their child is active on social media and is being influenced by the advertising campaigns (Nikken and Haan 2015). The youngest – Generation Z represent a huge part of the market and they influence the decisions their parents make in buying items.

Marketers are often interested in families because the children to them serve as great influencers and consumers. Influencers here provide information to the other members of the family about a product or service. The market that involves children is large and important because they have major influences on the family's budget allocation decisions and purchase choices (Jimenez et al. 2013). Depending on the child's age they become the best actors using emotions towards their parent not taking into account the financial state of their parents in order to provide their needs and wants. Children as mentioned earlier, play an important role in influencing parental shopping and spending habits. Therefore, marketers tend to make a child –friendly campaign on digital media, aired via tech devices to bring in customers and to increase the purchases initiated by children using different stimuli: colors, animations, media, voices, misquotes etc. (Kurtz 2008).

Another purported, though rarely studied, outcome of children's commercial exposure is an increased emphasis on materialism among younger children. Preadolescent girls, for example, are now purchasing more and more clothing, make-up, and other products that were formerly targeted to an adolescent teen market.

2.2. Psychological perspective

Two important information-processing tasks are required for any person to achieve a mature understanding of advertising messages. First, the individual must be able to distinguish between commercial and noncommercial content (programs). Research shows indicate that those below the ages of 8 years do not consistently distinguish program from commercial content, even when program/commercial separation devices are used.

The second essential cognitive task involved in a mature comprehension of advertising is the ability to recognize the persuasive intent of advertising and to apply that knowledge in the child's understanding of the advertising message. (Naumovska and Milenkovska 2017).

Exposing children to commercial messages can lead to negative outcomes, including parent child conflict, cynicism, obesity, and possibly materialistic attitudes (Calvert 2008).

All these marketing strategies, says Calvert, make children younger than eight especially vulnerable because they lack the cognitive skills to understand the persuasive intent of television and online advertisements. The new stealth techniques can also undermine the consumer defenses even of older children and adolescents (Eastman and Lui 2012).

Older children are more able to differentiate the commercial intent of the advertiser. However, taking into account their sensitive development phase, they are also easy target for advertisers. At this age they feel insecure, and their need for belonging is emphasized. Advertisers then, can manipulate them through their insecurities, actively encouraging them to seek pleasure and approval through consumption, influencing family budgets and purchasing decision making.

It is for these reasons that marketing to children should be carefully restricted. Children differ in their cognitive ability while trying to interpret television

advertisements and hence form different attitudes towards them. (Pankaj, Baisya, and Sharma 2010). In particular advertisements aimed at children under the age of 9, including on the Internet and during children's television programs, should be banned. Such advertising subsidizes the cost of these services at the cost of our children's values, sense of well-being, health and integrity and most importantly, the effects on family spending's will be balanced.

3. ANALYSIS AND DISCUSSION

The aim of the study is to examine the relationship between media exposure of children and spending habits of household with children. Considering the primary goal of the study combination of two approaches was used. First approach was to review the current theory, while the second approach was quantitative survey. The quantitative research was conducted among household with children in the period of June–August 2018. The research was conducted face to face in the homes of the respondents. A total of 92 households participated in the study. The questionnaire was structured in three parts: demography, spending habits and children's exposure to media.

The study examines the relationship between media exposure of children and spending habits of household with children. The analysis consists of testing the correlation between time that children spend on different media and household spending for toys. Also, it outlines the difference between different parental behaviour (parental control, supervision and usage of mobile devices as tool for conditioning) and spending habits of households for toys.

Sample:

The sample consisted of 92 households. Some of the family characteristics (number of persons in household and type of family) are presented in the graphs below.

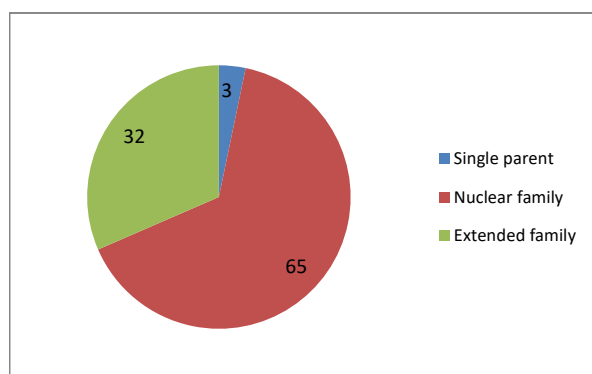


Figure 1. Type of family (%)

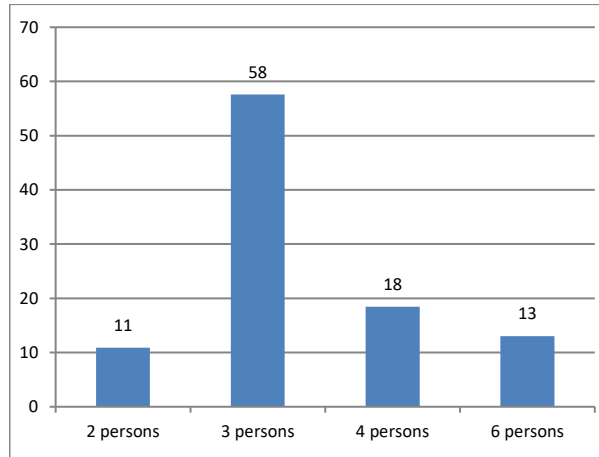


Figure 2. Number of persons in family including the guardian (%)

The graphs show that the majority of interviewed parents live in nuclear family, one third in extended household and small portion (3%) are single parents. Number of persons in family (related to type of family) shows that most of households consists of three persons (two parents and one child).

4. RESEARCH RESULTS

The results show the tests of relationships between usage of different devices, spending habits, number of children in household and conditioning with mobile telephony. The table below presents relationship between usage of different devices (measured in minutes) and number of children in household.

Table 1. Relationship between usage of different devices and number of children in household (below 18)

Aspects	Pearson correlation	Significance
Mobile telephone usage	-0.065	p > 0.05
Tablet usage	-0.473	p < 0.01
PC/Laptop usage	-0.099	p > 0.05
TV usage	0.061	p > 0.05

The table shows that there is only one significant relationship which is negative. Household with more children tend to use tablet less than household with lower number children. Other relationships are not significant.

Also, relationship between average monthly spending and usage of different devices (measured in minutes) was tested. The results are presented in table 2.

Table 2. Relationship between usage of different devices and average monthly spending for living costs

Aspects	Pearson correlation	Significance
Mobile telephone usage	0.145	p >0.05
Tablet usage	-0.041	p >0.05
PC/Laptop usage	-0.119	p >0.05
TV usage	-0.214	p < 0.05

The results in the table reveal only one negative correlation between average monthly spending for living costs and usage of TV. Households which spend more tend to use TV less and vice versa. Other tested relationships are not significant.

In order to detect different patterns of behavior, correlation between usages of different devices (measured in minutes) was performed. Other results (for example testing of relationship between usage of tablet and laptop) are not presented because there is no statistical relationship between usages of devices. The results are presented in table 3.

Table 3. Relationship between usage of different devices (tablet, laptop and TV) and mobile telephony

Aspects	Pearson correlation	Significance
Tablet usage	-0.498	p < 0.01
PC/Laptop usage	0.341	p < 0.05
TV usage	0.345	p < 0.05

The table shows that all correlations are significant. There is one negative and two positive relationships. The results imply that usage of mobile telephone has positive relationship with usage of PC/Laptop and TV, while there is a negative relationship between usage of mobile telephone and tablet.

Apart from these aspects, conditioning with mobile telephone was examined. The results tested differences in usage of mobile telephony (measured in minutes) between parents who said that they use mobile telephone for conditioning the children (eating or other desired behaviors) and parents who said that they do not use. The differences between these two groups are tested with t- test for independent groups and are presented in table 4 and table 5.

Table 4. Mean and standard deviation for parents who use and parents who do not use mobile telephone for conditioning

Usage of mobile telephony for conditioning	N	Mean	Standard Deviation
Yes, I do that	39	124.38	11.62
No, I don't do that	41	93.07	6.21

The results in table 4 show that children of parents who use mobile for conditioning spent more time on mobile compared to children of parents who don't do that.

Table 5. Differences in mobile usage among different groups of parents (those who use mobile telephone for conditioning and those who do not)

Aspects	t	Df	Significance
Difference	-0.498	p< 0.01	p< 0.01

There is a statistical difference in usage of mobile devices among children of parents who use mobile for conditioning compared to children of parents who don't use mobile devices for conditioning.

CONCLUSION

The theoretical research and the findings of the empirical study presented in this paper are strong indicator of a condition where kids are under significant unsupervised exposure of tech devices. Households with more children tend to use tablet less than household with lower number of children. Children that live in households with more children play with each other more of the time, while children which live in households with less children use more tablet. Households which spend more on living expenses tend to use TV less and vice versa. Households which spend less on living costs tend to use TV more because they probably lack budget for additional activities such as sports and outdoor activities, foreign languages courses and other children activities. On the other hand those who spend more use TV less due to the fact that their children are occupied.

The results show that usage of mobile telephone has positive relationship with usage of PC/Laptop and TV, while there is a negative relationship between usage of mobile telephone and tablet. Tablet and mobile telephone are on the same platform and provide same type of fun and content for children. The children, who use mobile telephones more, tend to use TV and laptops as well, being unsupervised by their parents in front of different types of screens.

Another important result is that children of parents who use mobile phones for conditioning spend more time on mobile devices compared to children of parents who don't use this kind of conditioning with their children. This leads to a conclusion that whenever mobile device is being used as a conditioning tool for children, may imply negative effects related to extended time spend of mobile device for the child itself. Furthermore, the content of the mobile device may not be adjusted for children and that can cause additional consequences. Even if the conditioning is successful resulting with kids expected behavior, still the negative implication of the hours spent on screen is significant (Kurtz 2008; Calvert 2008). Supervising the time of the children spend on mobile devices can be perceived as a very important instrument for children's healthy development. The given results in this research are clear indicator for children's extended unsupervised exposure on tech devices and screens that leads to alarming state where parents and relevant stakeholders must be addressed. Furthermore, one must understand that additional activities such as sports, reading and extra school activities can be valuable tools for balancing the negative effects of extended screen exposure. Members of Gen Z are born and raised in technological era and balancing the tech usage and other "analogue" activities is crucial for their development and well-being.

REFERENCES

- Ali, Akhter, Zuhaib Mustafa, Dharminder Kumar Batra, Nadu Ravichandran, and Shoiab Rehman. 2012. Examining the Children's Influence in Family. *International Journal of Scientific & Engineering Research* 3 (2): 58–63.
- Alvy Lisa, and Sarah Calvert. 2008. Food Marketing on Popular Children's Websites: A Content Analysis. *Journal of the American Dietetic Association*. 18 (1): 710–713.
- Arul, M., and Vijayadurai Vasudevan. 2016. Influence of Children on Parent's Buying Behaviour. *The cost and management* 44 (1):19–24.
- Budzanowska, Drzewiecka. 2015. Children as recipients of marketing communication on the Internet. *Jagiellonian Journal of Management* 1 (4): 253–273.
- Calvert, Sarah. 2008. Children as Consumers: Advertising and Marketing. *The Future of Children* 18 (1): 205–234.
- Davis, Joel. 2002. Marketing to children online: A manager's guide to the Children's On-line Privacy Protection Act. *Advanced Management Journal* 67 (4): 11–22.
- Eastman, Jackualine, and Jun Liu. 2012. The impact of generational cohorts on status consumption: An exploratory look at generational cohort and demographics on status consumption. *Journal of Consumer Marketing* 29 (2): 93–102.
- Ebster, Claus, Udo Wagner, and Deniese Neumueller. 2009. Children's influences on in-store purchases *Journal of Retailing and Consumer Services* 16 (2): 145–154.
- Jimenez, Fernando, John Hadjimarcou, Maria E. Barua, and Donald A. Michie. 2013. A cross-national and cross-generational study of consumer acculturation to advertising appeals. *International Marketing Review* 30(5): 418–439
- Kurtz, Don L. 2008. *Principles of Contemporary Marketing*. Stud ed. China: Thomson South-Western.
- Lemish, Dafina. 2007. *Children and Television: A global perspective*. Malden MA: Blackwell.
- Nairn, Agnes, and Cordelia Fine. 2008. Who's messing with my mind? *International Journal of Advertising* 27 (3): 447–470.
- Naumovska, Ljupka, and Angela Milenkovska. 2017. Marketing to children: the impact of digital media. *International Journal of Academic Research in Business and Social Sciences* 7 (5): 276–283.
- Nielsen, Jared. 2010. Children's Websites: Usability Issues in Designing for Kids. <http://www.nngroup.com/articles/childrens-websites> (accessed November 25, 2018).
- Nikken, Peter, and Marjon Schols. 2015. How and Why Parents Guide the Media Use of Young Children. *Journal of Child and Family Studies* 24 (11): 3423–3435.
- Nikken, Peter, and Jos de Haan. 2015. Guiding young children's internet use at home: Problems that parents experience in their parental mediation and the need for parenting support. *Cyberpsychology: Journal of Psychosocial Research on Cyberspace* 9 (1): 1–14.
- Ozkan, Mustafa, and Betul Solmaz. 2015. The Changing Face of the Employees: Generation Z and Their Perceptions of Work (A Study Applied to University Students). *Procedia Economics and Finance* 26: 476–483.
- Pankaj Priya, Rajat Kanti Baisya, and Seema Sharma. 2010. Television advertisements and children's buying behavior. *Marketing Intelligence & Planning* 28 (2):151–169.
- Priewasser Beate, Johannes Roessler, and Josef Perner. 2013. Competition as rational action: Why young children cannot appreciate competitive games? *Journal of Experimental Child Psychology* 116 (2): 545–59.
- Ramzy, Omar, Denise Ogden, James Ogden, and Mohamed Zakaria. 2012. Perceptions of Children's Influence on Purchase Decisions; Empirical Investigation for the U.S. and Egyptian Families. *World Journal of Management* 4 (1): 30–50.
- Roberts, Donald, Ullia Foehr, and Victoria Rideout. 2005. *Generation M: Media in the Lives of 8–18 Year-Olds*. Menlo Park, Calif.: Henry J. Kaiser Family Foundation.
- Rose, Gregory, David Boush, and Aviv Shoham. 2002. Family communication and children's purchasing influence: A cross-national examination. *Journal of Business Research* 55 (11): 867–873.
- Sramova, Blandina, Milan Dzapina, and Olga Juraskova. 2013. Impact of value structure on brand engagement depending on degree of self-esteem of adolescents. *International Journal of Innovation and Applied Studies* 3 (4): 931–940.