Children's Influence on Parent's Purchasing Decision in Toy Industry

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Abstract

Toys and games are played since the beginning of civilization and these play an important role in developing and training the mankind. This study describes the importance of the factors adopted by children that will influence the parent's purchasing decision. This study aims at identifying the various factors that are adopted by children and to study how these factors influence based on the demographics like age and gender. For the same the methodologies used are descriptive and exploratory. The questionnaire is also used to accomplish the objectives stated in this study and the independent t-test tool is adopted to check the relation between different demographics like age group and gender of children.

Various literatures have been studied and from the previous studies, the main gap analyzed that the factors adopted by children in considering toy purchasing decisions do not coordinate with parent's purchasing decisions. So this study attempts to study the factors adopted by children, which influences parent's toy purchasing decisions and testing these factors on demographics like age, gender, etc. and preparing hypothesis for the same and testing it through the independent t-test. Finally it has been concluded that selection decision of toys by children concerning gender are homogenous but concerning selection of toy based on their favorite cartoon characters, there is a significant difference as a boy child will select a toy based on his favorite cartoon character like hulk, Spiderman etc. and a girl child will select a toy based on her preferences such as frozen dolls, Anna-Elsa, etc. and there is also significant difference between the selection of toys based on different factors for different age group of children. This paper is very beneficial in future studies as it provides the various factors which are essential to an organization for improving its growth. Also it gives vision about the reasons for managing a good reputation in the eyes of its prospective customers.

Keywords: Toys, Children's influence on parents, Parents purchasing behavior, Toy industry.

Introduction

"The relation between a child and a toy is like a relation of flower and its fragrance as both cannot be separated" (Retrieved from www.theunboxingtoys.com). Toys and games are played since the beginning of civilization. These play an important role in developing

and training mankind. Nowadays there are wide ranges of toys and games available globally, namely, Wooden, Plastic, Pullback, Electronic, and various board games, it helps in developing hand-eye coordination, mathematical aptitude, some science skills. For a kid, it is said that "A sun may rise from the west or a day becomes night but a kid never stop playing with toys ever" (Retrieved from www.theunboxingtoys.com).

The global toy industry is a billion-dollar industry mainly dominated by a few key players namely, Mattel, Namco Bandai, Lego, Hasbro, etc. The total revenue from the global toy industry is 90.4 Billion US dollars (retrieved from statista.com on 12th January 2020), and the Indian toy industry is Toy Industry in India has observed a lot of changes over the last decade in terms of categories of toys such as innovation, catchy design and various other aspects. The Indian toy market was worth US $850 Billion (retrieved from Essays, UK on January 10, 2020). The Toy Association of India evaluates that about 90 percent of the Indian toy industry belongs to the non-organized sector as a major sector of India is unorganized.

Purchase decision-making is a multifarious and multistage practice, which is carried out not only by the purchaser himself but under the influence of other parties as well (B. Guneri, 2009). A family member has the right to make decisions or to be the most influential one in the family when cultural or social norms designate him/her as the rightful person. (Jeevananda & Sunita Kumar). Generally, a parent is influenced by his/her child in making purchasing decisions in toys. The child also acts as a medium to socialize the parents by influencing the family purchase decisions. (B. Guneri 2009).

Section-2: Literature Review

The paper has elaborated that toy purchase decision is derived by a set of factors which are purposed of using related factors emotional related factor and information relational factor. Teaching new and updated skills using toys was significant and suggested by parents when choosing and purchasing toys. All parties such as parents, teachers and other experts should unite to explain children the finest way to use specific types of toys and provide details for toy handling. The main finding in his study was that the respondents rated two factors as extremely important for toy selection, namely, purposes of using-related factors and children demographical-related considerations (Alkurdi Barween, 2017).

In this paper it is examined that presence of the heavy metal content in the plastic children's toys purchased from local markets or from local vendors of different districts in Uttar Pradesh to examine that six different colours of toys namely yellow 6 brands, orange 5 brands, green 3 brands, red and blue 4 brands, grey and purple 5 brands and pink and purple 3 brands used in this paper for the purpose of concentrations of heavy metals in the toys. The main finding in this study is that toys purchased from various districts of U.P. India contain large toxic heavy metals, such as Pb, Cd, Ni, Zn, Cr, Co and Mn in varying concentrations and most of them showing high concentrations of their limits which will badly affect in the children health and growth. (Naseem Ahmad et. al, 2012).

In another paper, the study is done on parents, children and internet connected toys and the results of a user study with nine parent-child pairs. The main concerns is on privacy and which hopes for parental controls children were often unconscious that others might be able to hear what was whispered to the toy. In this study various interviews conducted to conclude the results, the findings may conclude that many parents have mixed attitudes about the recording capabilities of these toys and these toy models are not yet adequately sophisticated and elastic for children's expectations. Children are already often exposed to toys that listen and cooperate but are not designed as toys (Emily McReynolds, et.al. 2017).

In this paper it is stated that the Indian consumers are more focused on value orientation. Indian consumers are very dynamic and price sensitive and the study is done on the insights, buying behavior and approval of the shoppers in Indian market. The major findings in this paper are that consumers undertake complex buying behavior when they are highly involved in a purchase and perceive significant differences among brands. Buyers are extremely elaborate when the product is luxurious, hazardous, purchased irregularly. Thus consumer has to authorize through a learning procedure, first emerging opinions about the product, then attitudes, and then making a considerate purchase selection. Marketers of luxurious products must know the information and evaluation conduct of luxurious shoppers. They need to assistance shopper's learning about the product class attributes and their related significance, and about what the company's brand offers on the significant attributes. (Subrato Dey, 2017).

This paper examines that to improve the accuracy of traditional evaluation methods by embedding sensors into daily life toys that deliver experts with added value extra evidence enhanced by Decision Support Systems (DSS). It will be likely to notice possible motoric disorders in a normal child's expansion that might keep hidden by traditional ways. The main finding in this paper are that the gaining of developed information from the natural contact of the children with these Smart Toys, the most operative and dependable way to nourish a DSS and experts is with

the real time watching information. (María Luisa Martín-Ruiz et. al, 2015).

Another paper describes that Indian parents spend an average of Rupees 250-300 on a toy. In this paper it is stated that technology up-gradation schemes are vital to make toy sector more productive and competitive in the globalized setting, despite of double digit growth, Indian toy industry is considerable backward in contrast to China's toy industry. (Sunny and Rajesh Sund 2014).

In another paper i.e. how's the children play and from which toy, stated that parents in our environment highly value the children's play and toys. The findings in this paper is analyzed by studying various other paper and authors statement, the main conclusion be stated that the impact of commercials or ads on the purchase of toys has a major sources for decisive influence, since parents tend to avoid marketing tricks. Nevertheless, it is important to remind parents that children are extremely susceptible to manipulation in commercials. Children tend to update with the upgrading technology and use or adopt the toys which are new in technology. (Jasmina Klemenovic 2014).

By studying various previous studies, a few authors described that children were affected by various commercials or by various advertisements and few other authors say that there are many factors like television advertisement, brands etc. which affect the consumer buying behavior in toy industry.

The main gap analyzed by studying various previous studies related to toys is that the factors adopted by children in considering toy purchasing decisions do not coordinate with parent's purchasing decisions. So this study helps in studying the factors adopted by children, which influences parent's toy purchasing decisions and testing these factors on demographics like age, gender, etc.

Section-3 Objectives:

1.To study the factors adopted by children to influence parent's purchasing decision in toy industry.

2.To study how these factors get influenced on the basis of the demographics.

The Research Methodology of the study is descriptive and exploratory as this study is emanated from relevant past studies. Based on past studies factors have been identified. With the help of an Independent t-test, it is identified that how these factors would influence on demographics like gender and age of a child. To fulfill the objectives, the study can be divided into two parts. The first part elaborates on the relevant past studies, which were discussed in section-2. The second objective has been fulfilled with the help of an Independent t-test discussed in section-4.

Hypothesis For Gender:

H1: There is no significant difference in the selection of a toy based on colors for either a boy or a girl child.

H2: There is no significant difference in the selection of a toy based on cartoon characters for either a boy or a girl child.

H3: There is no significant difference in the selection of a toy based on advertisements for either a boy or a girl child.

H4: There is no significant difference between the selection of a toy based on peer groups for either a boy or a girl child.

H5: There is no significant difference between the selection of a toy based on different replicas of gadgets for either a boy or a girl child.

H6: There is no significant difference between the selection of a toy based on brands for either a boy or a girl child.

H7: There is no significant difference between the selection of a toy based on size for either a boy or a girl child.

H8: There is no significant difference between the selection of a toy based on technology for either a boy or a girl child.

Hypothesis for Age:

H1: There is no significant difference between the selection of a toy based on colors for different age groups.

H2: There is no significant difference between the selection of a toy based on cartoon characters for different age groups.

H3: There is no significant difference between the selection of a toy based on advertisements for different age groups.

H4: There is no significant difference between selection of a toy based on peer groups for different age groups.

H5: There is no significant difference between the selection of a toy based on different replicas of gadgets for different age groups.

H6: There is no significant difference between the selection of a toy based on brands for different age groups.

H7: There is no significant difference between the selection of a toy based on the size for different age groups.

H8: There is no significant difference between the selection of a toy based on the technology for different age groups.

SECTION-4: RESULTS

TABLE 1: GROUP STATISTICS:

Group Statistics

Variables	Var0002 Gender of your child	N	Mean	Std. Deviation	Std. Error Mean
Var0003	Boy Child	61	3.51	1.609	.206
My child selects a toy on the basis of colors like blue, pink etc.	Girl Child	42	3.52	1.811	.279
Var0004	Boy Child	61	3.87	1.477	.189
My child selects a toy on the basis of their favourite cartoon characters like doraemon, shinchan, frozen etc.	Girl Child	42	3.48	1.756	.271
Var0005	Boy Child	61	3.25	1.813	.232
My child is influenced by toy advertisement to select a toy.	Girl Child	42	3.64	1.650	.255
Var0006	Boy child	61	3.98	1.372	.176
My child is influenced by the peer groups in selection of a toy.	Girl Child	42	4.43	.941	.145
Var0007	Boy Child	61	3.38	1.685	.216
My child selects those toys that he/she finds replicas of gadgets carried by parents, brother or sister such as laptop, ATM etc in toy form	Girl Child	42	3.29	1.672	.258
Var0008	Boy Child	60	3.32	1.722	.222
My child selects a toy on the basis of brands.	Girl Child	42	3.60	1.624	.251
Var0009	Boy Child	61	3.54	1.709	.219
My child selects a toy on the basis of their size like big or small.	Girl Child	42	3.17	1.666	.257
Var0010	Boy Child	61	4.10	1.313	.168
My child selects a toy on the basis of technology such as Sensors toys etc.	Girl Child	42	3.88	1.365	.211

In table-1, an independent-samples t-test was conducted to compare different hypotheses with the gender of a child in the selection of toys.

In above, the N represents a number of individuals in the group or the group sample size. The Mean represents the average for each group. The sample "Standard Deviation is the square root of the sample variance" (Retrieved from Chapter 207, NCSS.com). The "Standard Error Mean is the estimated standard deviation for the distribution of sample means for an infinite population. It is the sample standard deviation divided by the square root of sample size, n".

There are eight variables in this table and each variable consists of bifurcation of gender, number of individuals, means, standard deviation and their standard error mean

TABLE-2: INDEPENDENT SAMPLE TEST:

		Levene's Test for equality of variances	t-test for equality of means			
		Sig.	t-value	Sig.(2-tailed)	95% confidence interval of difference	
					Lower	Upper
My child selects a toy on the basis of colors.	Equal variance assumed. Equal Variance not assumed.	.080	-.05 -.04	.963 .964	-.69 -.71	.66 .68
My child selects a toy on the basis of their favorite cartoon characters.	Equal variance assumed Equal Variance not assumed.	.017	1.23 1.19	.223 .238	-.24 -.27	1.03 1.05
My child is influenced by toy advertisement to select a toy	Equal variance assumed Equal Variance not assumed	.095	-1.13 -1.15	.260 2.52	-1.09 -1.08	.30 .29

My child is influenced by the peer groups in selection of a toy.	Equal variance assumed Equal Variance not assumed	.011	-1.83 -.195	.071 .054	-.93 -.90	.04 .01
My child selects those toys that he/she finds replicas of gadgets.	Equal variance assumed Equal Variance not assumed	.812	.27 .27	.785 .786	-.57 -.57	.75 .76
My child selects a toy on the basis of brands.	Equal variance assumed Equal Variance not assumed	.210	.82 .83	.413 .408	-.95 -94	.39 .39
My child selects a toy on the basis of their sizes.	Equal variance assumed Equal Variance not assumed	.495	1.10 1.11	.272 .270	-.30 -.30	1.05 1.05
My child selects a toy on the basis of technology.	Equal variance assumed Equal Variance not assumed	.731	.81 .81	.418 .422	-.31 -.32	.75 .75

In the above i.e.Table-2, the Levene's test is applied, which is an "inferential statistic used to assess the equality of variances for a variable calculated for two or more groups". (Howard Levene,1960). As, in this test, if the significance value is greater than 0.05, then Levene's test is non-significant so Equal variances are assumed and vice-a-versa.

In the table-2,

Firstly checking the Levene's test in the first hypothesis, the Significance value is 0.08, Sig. > 0.05 so equal variance is assumed.

Now checking the sig. value for 2-tailed in as follow, Sig(2-tailed) value > 0.05 so it is stated that there is no significant difference between selection of color and gender of a child.

In the second hypothesis, checking the Levene's test, the significance value is 0.017 which is less than 0.05 so, Sig. < 0.05 so Equal Variance not assumed.

Now checking the sig. value for 2-tailed in as follow, Sig (2-tailed) value > 0.05 so it is stated that there is significant difference between selection of favorite cartoon and gender of the child.

In the third hypothesis checking Levene's test, the Significance value is 0.95 which is greater than 0.05, so the equal variance is assumed.

Now checking the sig. value for 2-tailed in as follow, Sig(2-tailed) value > 0.05 so it is stated that there is no significant difference between advertisement and gender of the child.

In the fourth hypothesis, checking the Levene's test, thesignificance value is.011 which is less than the 0.05 so Equal Variance not assumed.

Now checking the sig. value for 2-tailed in as follow, Sig(2-tailed) value > 0.05 so it is stated that there is no significant difference between peer groups and gender of a child.

In the fifth hypothesis, checking the Levene's test, the Significance value is 0.812 so, Sig. > 0.05 so equal variance is assumed.

Now checking the sig. value for 2-tailed in as follow, Sig(2-tailed) value > 0.05 so it is stated that there is no significant difference between the selection of replicas of gadgets and gender of a child.

In the sixth hypothesis, checking the Levene's test, the significance value is 0.210 so, Sig. > 0.05 so equal variance are assumed.

Now checking the sig. value for 2-tailed in as follow, Sig(2-tailed) value >0.05 so it is stated that there is no significant difference between the selection of brand and gender of a child.

In the seventh hypothesis, checking the Levene's test, the significance value is 0.495 so, Sig. > 0.05 so equal variance are assumed.

Now checking the sig. value for 2-tailed in as follow, Sig(2-tailed) value > 0.05 so it is stated that there is no significant difference between the selection of size and gender of a child.

In the last hypothesis, checking the Levene's test, the significance value is 0.731 so, Sig. > 0.05 so equal variance are assumed.

Now checking the sig. value for 2-tailed in as follow, Sig(2-tailed) value > 0.05 so it is stated that There is no significant difference between the selection of size and gender of a child there is no significant difference between selection of technology and gender of child.

TABLE-3: TEST OF HOMOGENEITY OF VARIANCES (on the basis of age groups)

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Var0003	Based on Mean	34.906	2	100	.000
My child selects a toy on the basis of colors like blue, pink etc	Based on Median	4.747	2	100	.011
	Based on Median and with adjusted df	4.747	2	57.896	.012
	Based on trimmed mean	30.664	2	100	.000

Var0004 My child selects a toy on the basis of their favourite cartoon characters like doraemon, shinchan, frozen etc.	Based on Mean	50.217	2	100	.000
	Based on Median	7.947	2	100	.001
	Based on Median and with adjusted df	7.917	2	65.228	.001
	Based on trimmed mean	46.248	2	100	.000
Var0005 My child is influenced by toy advertisement to select a toy.	Based on Mean	19.109	2	100	.000
	Based on Median	7.055	2	100	.001
	Based on Median and with adjusted df	7.055	2	81.134	.001
	Based on trimmed mean	18.743	2	100	.000
Var0006 My child is influenced by the peer groups in selection of a toy.	Based on Mean	11.624	2	100	.000
	Based on Median	6.449	2	100	.002
	Based on Median and with adjusted df	6.449	2	70.892	.003
	Based on trimmed mean	10.231	2	100	.000
Var0007 My child selects those toys that he/she finds replicas of gadgets carried by parents, brother or sister such as laptop, ATM etc in toy form	Based on Mean	5.788	2	100	.004
	Based on Median	3.361	2	100	.039
	Based on Median and with adjusted df	3.361	2	94.364	.039
	Based on trimmed mean	5.850	2	100	.004
Var0008 My child selects a toy on the basis of brands.	Based on Mean	5.772	2	99	.004
	Based on Median	5.542	2	99	.005
	Based on Median and with adjusted df	5.542	2	93.319	.005
	Based on trimmed mean	6.437	2	99	.002

Var0009 My child selects a toy on the basis of their size like big or small.	Based on Mean	6.181	2	100	.003
	Based on Median	2.270	2	100	.109
	Based on Median and with adjusted df	2.270	2	95.367	.109
	Based on trimmed mean	5.860	2	100	.004
Var0010 My child selects a toy on the basis of technology such as Sensors toys etc.	Based on Mean	5.548	2	100	.005
	Based on Median	3.711	2	100	.028
	Based on Median and with adjusted df	3.711	2	96.632	.028
	Based on trimmed mean	5.680	2	100	.005

Based on the output in the test of homogeneity of variance table above it is stated that, In all variables, $p < 0.05$ in which the null hypothesis is rejected which violates the homogeneity of variance assumption needed for an Analysis of Variance (ANOVA).

So ANOVA test failed and therefore the Brown-Forsythe is applied.

TABLE-4: BROWN – FORSYTHE TEST

Robust Tests of Equality of Means

		Statistic[a]	df1	df2	Sig.
Var0003 My child selects a toy on the basis of colors like blue, pink etc.	Brown-Forsythe	38.015	2	76.807	.000
Var0004 My child selects a toy on the basis of their favorite cartoon characters like doraemon, shinchan, frozen etc.	Brown-Forsythe	32.846	2	76.583	.000
Var0005 My child is influenced by toy advertisement to select a toy.	Brown-Forsythe	21.972	2	71.066	.000

Var0006 My child is influenced by the peer groups in selection of a toy.	Brown-Forsythe	4.478	2	70.097	.015
Var0007 My child selects those toys that he/she finds replicas of gadgets carried by parents, brother or sister such as laptop, ATM etc. in toy form	Brown-Forsythe	9.395	2	89.430	.000
Var0008 My child selects a toy on the basis of brands	Brown-Forsythe	14.697	2	79.165	.000
Var0009 My child selects a toy on the basis of their size like big or small	Brown-Forsythe	9.295	2	95.673	.000
Var0010 My child selects a toy on the basis of technology such as Sensors toys etc	Brown-Forsythe	4.761	2	85.618	.011

a. Asymptotically F distributed.

The interpretation of the table-4 is as follows:

In the first hypothesis, the significance value is 0.000 which is less than 0.05 so the null hypothesis is rejected and concluded that there is a significant difference between the selection of color and different age groups.

In the Second hypothesis, the significance value is 0.000 which is less than 0.05 so the null hypothesis is rejected and concluded that there is a significant difference between the selection of favorite cartoon characters and different age groups.

In the first hypothesis, the significance value is 0.000 which is less than 0.05 so the null hypothesis is rejected and concluded that there is a significant difference between advertisements and different age groups.

In the fourth hypothesis, the significance value is 0.015 which is less than 0.05 so the null hypothesis is rejected and concluded that there is a significant difference between peer groups and different age groups.

In the fifth hypothesis, the significance value is 0.000 which is less than 0.05 so the null hypothesis is rejected and concluded that there is a significant difference between the selection of replicas of gadgets and different age groups.

In the sixth hypothesis, the significance value is 0.000 which is less than 0.05 so the null hypothesis is rejected and concluded that there is a significant difference between the selection of brand and different age groups.

In the seventh hypothesis, the significance value is 0.000 which is less than 0.05 so the null hypothesis is rejected and concluded that there is a significant difference between the selection of size and different age groups.

In the last hypothesis, the significance value is 0.011 which is less than 0.05 so the null hypothesis is rejected and

concluded that there is a significant difference between the selection of size and different age groups.

Section-5: Conclusion:

In this study, the various factors adopted by children are gathered after studying previous studies. From these studies, the gap arises that the factors adopted by children do not coordinate with parent's purchasing decision and this gap can be reduced by collecting responses from the parents and based on the above responses t-test was adopted to check how these factors affect the demographics of children like age group, gender, etc. It has been concluded that the selection decision of toys by children concerning gender are homogenous as there is no difference on the selection of toys based on factors like colors, advertisements, brands, sizes, technologies, replicas of toys but concerning the selection of toy based on their favorite cartoons character, there is a significant difference as a boy child will select based on his favorite cartoon character like hulk, spiderman, etc. and a girl child will select a toy based on her preference like Barbie, frozen, etc. and there is also a significant difference between the selection of toys based on different factors for different age group of children.

Section-6: Future Scope:

In this research work, some factors are identified which will help an organization to design customized strategies for children and valuable conclusion on these factors are being evaluated and reported. These factors can be further validated for independent t-test for testing the selection decision of toys by children concerning gender and age. This paper is very useful in further studies as it provides information about factors which are needed by an organization for enhancing its growth. Also it gives insights about reasons for managing a good reputation in the eyes of its prospective customers i.e. children.

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