Brand Loyalty Amidst Perceived Health Risk: A Study of Perception of Maggi Noodles Amongst Delhi Residents Before and After Controversy Across Demographic Variables

Narander Kumar Nigam & Saumya Jain
University of Delhi, Delhi, India

Abstract

The instant noddles market in India is reeling under an unprecedented crisis with the banning of the country's favourite 2-minute snack: Swiss giant Nestle's Maggi. The reports of food regulators in India have confirmed the presence of excess amount of lead and MSG in Maggi. Maggi enjoys a fan following in India like no other and with the company claiming the noodles safe for consumption, there is a need to know whether decades old association with any brand changes consumers' perception after discovery of health risk and has the perception of Maggi brand changed significantly after the controversy. Also, it is important to know whether socio-demographic factors such as age, gender, marital status etc have any impact on consumer perception of the country's beloved snack. This study is the first of its kind to study empirically the impact of controversy surrounding a particular brand. The study was conducted in Delhi and the sample was chosen to be a representative of all demographic variables. The findings show that consumer perception about Maggi has gone from good (before controversy) to bad (after controversy). Pre-controversy perception of Maggi was invariably good across all demographic sectors and has been seriously affected after crisis across all demographics. Also, the perception of Maggi worsened with progression in age and the impact was much severe after controversy. Males seemed to be much more affected by the controversy than females and the controversy seemed to have affected married respondents more than singles, whose perception has seen a larger slide than their unmarried counterparts. Overall, the findings capture the general somber sentiment across the nation and give enough evidence that customers across all demographic groups are not willing to bargain on health aspects even where there is so much as a perceived threat despite decade long association with a brand.

Introduction

Maggi is a popular brand of Nestle -a Swiss multinational company with presence in more than 130 countries. Maggi merged with Nestle in 1947 and has been its top performing products

ever since contributing over a twenty percent of Nestle' revenue. Maggi contributes a significant portion of Nestle's total business especially in India and Malaysia. Nestle's Maggi noodles has been an ultimate success story in India-it is a product embraced by kids, teenagers and parents alike. Maggi's association with India dates back to 1982 when instant food was something unheard of. With its entry, Maggi created an entirely different product line –instant noodles and has seen unprecedented success in a diverse market.

"According to the World Instant Noodles Association, India consumed 5,340 million cups or bags of instant noodles through 2014. It counts among the fastest growing markets in the world for the snack, having almost doubled in size since 2010 when it accounted for 2,940 million units. Maggi is estimated to have a 70 per cent share of the market, and contributes nearly 30 per cent to its parent's company Nestle's annual turnover."

For nearly three decades, Indians have shared an emotional bond with this product that goes beyond brand loyalty. It is a solution to hunger at any time of day or night. Thus the entire country was more than in a bit of a shock when UP's Food Safety and Drug Administration proved beyond doubt that Maggi contained more than permissible levels of lead – a highly poisonous substance and MSG (monosodium glutamate). This was a serious blow to the brand which was one of the top 5 trusted brands according to survey by Brand Equity in 2014. What followed was ban on Maggi in several states, dropping of Maggi from the shelves of big retailers and Army issuing an advisory to its canteens against stocking the product.

The company's response to the controversy can be best described as too little too late. The company issued a standardized statement reiterating that the noodles are safe for consumption and the samples have been verified at independent labs. However, the country's apex food regulator FSSAI, ordered Nestle to recall all types of Maggi noodles from the market and imposed ban on its sale.

The Maggi controversy has been a watershed moment in packaged food industry and snowballed into FSSAI being extra cautious and denying approvals to a variety of products.

Though controversies related to packaged food is not new – this controversy has redefined the instant noodles market and is likely to change consumer's perception towards all packaged foods per se.

Literature Review

Consumer perception is a process that encompasses consumers' awareness and consciousness about a product. The information retained by the consumers defines the ways to meet his need and wants. Consumer perception is relevant for marketers as consumers base their decision on perception rather than facts. All the marketing strategies revolve around creating a favorable perception of the product in the minds of the consumers. Brand loyalty is repetitive purchase of a commodity arising from consistency in product performance. Brand loyalty is a manifestation of consumer's perception of superior product quality and this is all the more relevant for food products since health safety is a major concern when buying any product. A study of 681 Croatian consumers in 2013 in the aftermath of several food products recall in Croatia revealed that positive brand experience, high and stable product quality and recognizable taste were main factors influencing brand loyalty. Product safety was identified as one of the main reasons for negative association with the brand. An overwhelming 62% of the consumers opined stopping consumption of the controversial products till the time they could be sure of product quality. The research concluded that product withdrawal makes a huge dent in the consumer perception

during the controversy and for some time afterwards (Ferencic & Wolfing, 2013). Haider and Jan (2013) identified factors contributing to brand loyalty in fast food restaurants in Pakistan and concluded that better rated products are those which are able to excel in taste, quality & price. Souiden and Pons (2009) conducted a study on 573 respondents in 2006 pertaining to impact of automobile recalls on manufacturer's image and discovered that voluntary recall had a significant and positive impact on image of the manufacturer and contesting the defects had a negative impact on customer loyalty and future purchase decision. Controversies such as product recalls do have an impact on the image of the manufacturer and interim purchase decisions of the consumers.

Controversies surrounding food products and beverages are not new to India. Following is a synopsis of some major brands embroiled in controversies in India:

On August 5th 2003, The Centre for Science and Environment (CSE), an NGO in India issued a press release stating "12 major cold drink brands sold in and around Delhi contain a deadly cocktail of pesticide residues". As an aftermath, the Government banned the sale of these soft drinks in Parliament and directed the State Governments to test the products within their regions. Due to this uproar, sales of Coca-Cola Products dropped by 30-40% and stock prices went down by US$5 in the New York Stock Exchange. Independent testing by the Government revealed that the pesticide residues were within local standards but exceeded the EU safety norms proving the company's claim wrong. A survey of consumer's opinion about the Government's decision to ban the soft drinks revealed that most of the consumers were comfortable with the ban and wouldn't risk their health till the companies made amends.

In the same year, in October 2003, testing of Cadbury's chocolates in Mumbai revealed the presence of worms. Cadbury which commanded a giant 70% share of the chocolate market in India suffered a big blow as the consumer sentiment was already on the downside due to recent soft drinks controversy. Though the reason behind the infestation was storage problems, yet the consumer trust was shaken up and sales were hit by almost 30% in the festive season. 'In a survey carried out in 2013 by TUV SUD, a global testing and certification company, amongst a total of 1,063 customers and 116 businesses in India, it was found that Indian consumers accorded higher importance to safety aspect of the product rather that brand loyalty.

According to the said survey, around 90% of the consumers were willing to pay extra for safety assurance. Sharma and Narwal (2006) conducted a study of 187 respondents in Northern Haryana, India to gauge the consumer attitude towards allegations of pesticides and worm infestation and company's response to the crisis. The survey revealed that consumers were able to differentiate between socially responsible and irresponsible behavior of the MNCs and their behavior was significantly affected by the response of the companies towards the crisis. The study concluded that the crisis invariably leaves an impression of distrust in the mind of the consumers.

Research Gap

The present study is the first of its kind in India to determine the perception of the consumers towards a particular brand before and after controversy surrounding the product empirically. The studies done abroad have not focused on a particular brand but rather gauged consumer perception towards food products and automobiles product recalls in general. Also this study is the first of kind in India to study consumer perception of a controversial food product across demographic variables. Maggi is a household name in India and given its emotional bond with the people, this study aims to determine the impact of perceived health risk on decades old consumer confidence and trust.

Need of the Study

Maggi has been the staple food in India and in the light of the recent controversy, it is pertinent to know whether the perception of the consumers towards the company and the product has changed and whether there has been a change in the consumption pattern of consumers. Our country had embraced this product like no other, so it is important to determine whether there has been a change in the loyalty of the consumer base and whether consumer perception is affected by age, gender, marital status etc. There is a section of consumers who are vocalising their support in the form of videos and jokes and there are some who feel this is just a publicity stunt by the company to come into the limelight. With differing opinion on the controversy, the authors are interested in knowing whether decades of trust can be impaired by allegations of harmful substances in the product consumed.

Objectives of the Study

The following were the objectives of the study:

1. To study perception about Maggi before and after controversy.
2. To study the impact of age of consumers on perception about Maggi before and after controversy.
3. To study the impact of gender on perception about Maggi before and after controversy.
4. To study the impact of marital status on perception about Maggi before and after controversy.
5. To find the reasons for change in perception of Maggi post controversy.

Research Hypothesis

H_{01}: Perception about Maggi is equal before and after controversy.

H_{02}: Perception about Maggi across different age groups is equal.

H_{03}: Perception about Maggi is equal across gender.

H_{04}: Perception about Maggi of Singles is equal to Perception about Maggi amongst Married Persons.

Research Methodology

Type of Study

The study is a descriptive study design using survey method.

Sample

A sample size of 64 was selected from different demographic groups across age, gender and marital status through self-administered questionnaires. The main demographic targeted were the people who were more conscious & aware about the brand. People who have been consuming noodles were better able to answer the questions regarding the taste, price, image, brand & the reasons for their consumption & purchase.

The current study population was divided into two samples that were found as follows:

Sample 1: (Male)

Sample 2: (Female)

Table 1: Gender wise description of respondents

Gender		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	29	45.3	45.3	45.3
	Female	35	54.7	54.7	100.0
	Total	64	100.0	100.0	
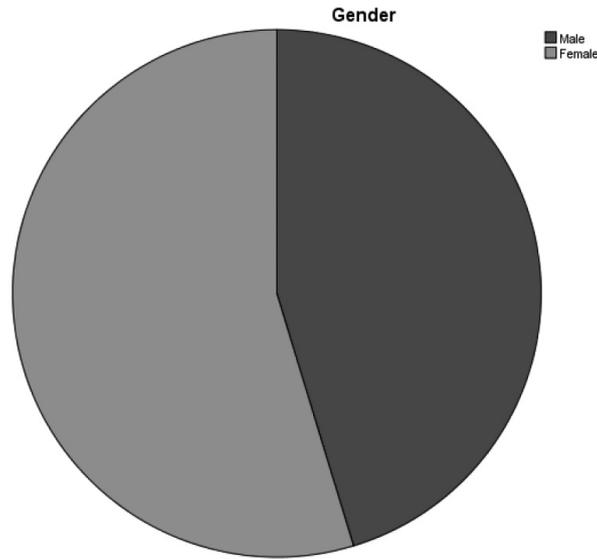
Figure 1. Pie-chart showing the Gender distribution of the respondents.

Secondly, population was divided into four samples that were found as follows:

(i)   Sample 1: (≤ 20 Years);

(ii) Sample 2: (21-30);

(iii) Sample 3: (31-40); and

(iv) Sample 4: (≥ 41)

Table 2: Age Description of the respondents

Age_1		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	18	28.1	28.1	28.1
	2.00	19	29.7	29.7	57.8
	3.00	13	20.3	20.3	78.1
	4.00	14	21.9	21.9	100.0
	Total	64	100.0	100.0	

Age_1

■ 1.00
■ 2.00
□ 3.00
■ 4.00
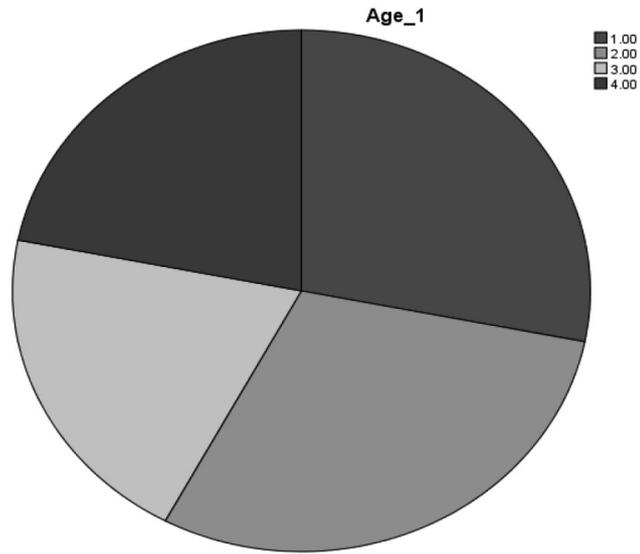
Figure 2. Pie chart showing the different age groups of the respondents

The marital status of population was divided into two samples that were found as follows:

(i)   Sample 1: (Single); and

(ii) Sample 2: (Married)

Table 3: Marital Status Description

Marital Status		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Single**	32	50.0	50.0	50.0
	Married	32	50.0	50.0	100.0
	Total	64	100.0	100.0	

Marital Status

■ Single
□ Married

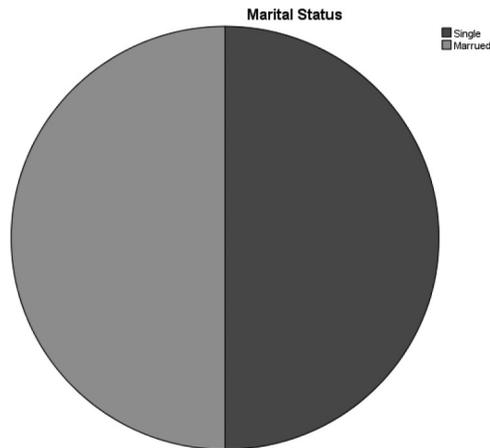**Figure 3. Pie chart showing marital status of respondents**

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In next part, study population was divided into three samples that were found as follows:

(i)   Sample 1: (Students);

(ii) Sample 2: (Service); and

(iii) Sample 3: (Others)

Table 4: Occupation Description

Occupation		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**Service**	37	57.8	59.7	59.7
	Student	20	31.3	32.3	91.9
	Others	5	7.8	8.1	100.0
	Total	62	96.9	100.0	
Missing	**System**	2	3.1		
Total		64	100.0		
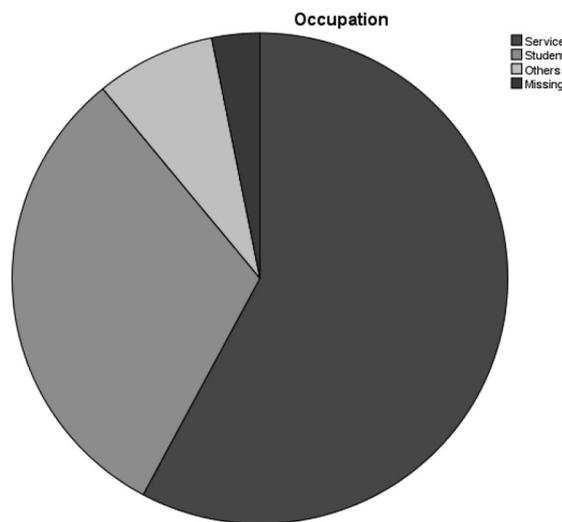
Figure 4. Occupation Description

Next, the population was divided into two samples as follows:

(i)   Sample 1: (less than equal to 50000 monthly family incomes); and

(ii) Sample 2: (More than 50000 monthly family income)

Table 5: Income Description

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	**1.00**	28	43.8	45.9	45.9
	2.00	33	51.6	54.1	100.0
	Total	61	95.3	100.0	
Missing	**System**	3	4.7		
Total		64	100.0		

Figure 5. Income Description

Data Collection

The data was collected through self-administered questionnaires. Some questionnaires were distributed to respondents and some questionnaires were administered through face to face interview.

Pretesting

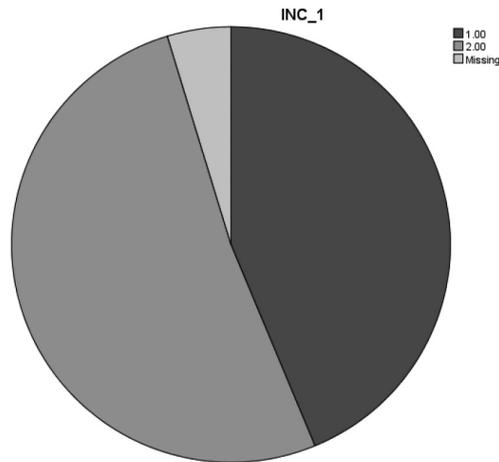It was pretested (self-administered tests) on a sample of 15 respondents who were chosen as a result of judgment sampling and feedback was considered in finalizing the questionnaire.

Results of Pretesting

Cronbach's Alpha was computed to know the reliability of the data. Cronbach Alpha for internal consistency was .741 which shows that there is reliability and internal consistency.

Dependent and Independent variables

Perception of product has been identified as the dependent variable in this study. It consists of seven dimensions measured before and after controversy:

1.   The first aspect is Quality.

2.   The second aspect Price (Value for money).

3.   The third aspect is Outlook towards Advertisement, i.e., the emotions invoked in the consumer's mind when they see the advertisement.

4.   The fourth aspect is Reputation of Company.

5.   The fifth aspect is Brand Image.

6.   The sixth aspect is Proper Disclosure of Product content.

7.   The seventh aspect is Involvement with consumers, i.e., degree of engagement with the consumers

Data Analysis Method

There were 14 questions in questionnaire and each question had 5 options (1 = Very bad, 2 = Bad, 3 = neither, 4 = Good, 5 = Very good). The questions were combined into one summated scale on which the tests were performed.

Very bad perception = Less than equal to 13,

Bad perception = More than equal to 14 and less than equal to 20.

Good perception = More than equal to 22 and less than equal to 27.

Very Good perception = More than equal to 28.

All data were analyzed using the Statistical Package for the Social Sciences (SPSS) 20.0 software. As the number of respondents are more than 30, data is normally distributed and all parametric tests can be applied (Central Limit Theorem).

Statistical Tools Used

1. Co-efficient of Reliability
2. Paired t- test
3. Test of Homogeneity of Variances
4. Arithmetic mean and median
5. Regression analysis

Results and Discussion

In this research, internal consistency analysis was conducted to assess the reliability of this constructed measurement for perception of consumers. All seven aspects were identified to measure the variable of perception which is the dependent variable of this study.

Table 6: Case Processing Summary

		N	%
	Valid	38	59.4
Cases	Excluded [a]	26	40.6
	Total	64	100.0
a. List wise deletion based on all variables in the procedure.

Table 7: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.865	.864	28

The internal consistency analysis yielded Cronbach's alpha coefficients 0.864, which is significantly higher than the 0.7. Hence, based on the validation of construct reliability it is concluded that research construct of Perception is reliable in this study.

Perception about Maggi Pre-Post Controversy

Paired 't' test is applied to capture perception about Maggi pre-post controversy. According to the scale, mean score of pre- controversy perception about Maggi is 27.4074 and standard

deviation is 4.4953. This means Pre- controversy perception about Maggi is very good. Mean score of post- controversy perception about Maggi is 16.4815 and standard deviation is 6.39204. This means post- controversy, Maggi perception turned bad.

Table 8: Paired Samples Statistics (Pair: Perception of Maggi before Controversy and Perception of Maggi after Controversy)

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Perception of Maggi Before Controversy	27.4074	54	4.49536	0.61174
	Perception of Maggi After Controversy	16.4815	54	6.39204	0.86985

Table 9: Paired Samples Test (Pair: Perception of Maggi before Controversy and Perception of Maggi after Controversy)

		Mean	Paired Differences					T	Df	Sig. (2-tailed)
			Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
					Lower	Upper				
Pair 1	**Perception of Maggi Before Controversy- Perception of Maggi After Controversy**	10.925	6.8428	0.93119	9.0581	12.79366		11.733	53	0.000

At significance level of 1%, paired t-test result shows p value - less than 1%. Thus, there is a significant statistical difference in perception of Maggi before and after controversy.

Perception of Maggi across Different Age groups- Before and After Controversy

In this section, perception of Maggi (before controversy) was taken as dependent variable and age of consumers was taken as independent variable. Regression analysis (after checking all the assumptions of regression), reveals a statically significant impact of age on perception of Maggi before controversy. However, it was observed that with increase in age of consumers, perceptions of Maggi turned bad.

Table 10: Perception of Maggi before Controversy as a function of Age:

Dependent Variable: Perception of Maggi Before Controversy				
Method: Least Squares				
Date: 07/05/15 Time: 19:24				
Sample: 1 64				
Included observations: 59				
HAC standard errors & covariance (Bartlett kernel, **Newey-West fixed** bandwidth = 4.0000)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
AGE	-0.254579	0.100689	-2.528380	0.0143
C	34.97239	3.177427	11.00651	0.0000
R-squared	0.170707	Mean dependent var		27.08475

(Continued...)

Adjusted R-squared	0.156158	S.D. dependent var	4.807638
S.E. of regression	4.416339	Akaike info criterion	5.841810
Sum squared resid	1111.731	Schwarz criterion	5.912235
Log likelihood	-170.3334	Hannan-Quinn criter.	5.869301
F-statistic	11.73321	Durbin-Watson stat	1.808048
Prob.(F-statistic)	0.001145	Wald F-statistic	6.392706
Prob.(Wald F-statistic)	0.014253		

In the following section, perception of Maggi (after controversy) has been taken as dependent variable and age of consumers has been taken as independent variable.

Table 11: Perception of Maggi after Controversy as a function of Age:

Dependent Variable: Perception of Maggi After Controversy			
Method: Least Squares			
Date: 07/05/15 Time: 19:28			
Sample: 1 64			
Included observations: 54			
HAC standard errors & covariance (Bartlett kernel, Newey-West fixed bandwidth = 4.0000)			
Variable	**Coefficient**	**Std. Error**	**t-Statistic**	**Prob.**
AGE	-0.254111	0.084298	-3.014450	0.0040
C	24.23658	3.000530	8.077433	0.0000
Variable	Coefficient	Std. Error	t-Statistic	Prob.
R-squared	0.091469	Mean dependent var		16.48148
Adjusted R-squared	0.073998	S.D. dependent var		6.392037
S.E. of regression	6.150995	Akaike info criterion		6.507439
Sum squared resid	1967.406	Schwarz criterion		6.581105
Log likelihood	-173.7008	Hannan-Quinn criter.		6.535849
F-statistic	5.235268	Durbin-Watson stat		1.615422
Prob(F-statistic)	0.026229	Wald F-statistic		9.086910
Prob(Wald F-statistic)	0.003974			

Regression analysis (after checking all the assumption of regression), reveals a statistically significant impact of age on perception of Maggi after controversy. However, with advancement in age, perception of Maggi went from good to bad but at a lower rate compared to before controversy. Overall across age, perception of Maggi after controversy become down (constant has gone down)

Perception of Maggi across Gender: Before and After controversy

In this part of study, paired "T" test is applied to capture gender effect on perception about Maggi. Firstly, Paired t-test was run on the male respondents. According to our scale, mean score of Pre- controversy perception about Maggi is 27.280 and standard deviation is 4.97. This means Pre- controversy perception about Maggi amongst males is good. Mean score of Post- controversy perception about Maggi is 14.76 and standard deviation is 5.1419. This means post- controversy perception about Maggi is bad.

Table 12: Paired Samples Statistics (Perception about Maggi amongst Males before and after controversy)

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Perception of Maggi Before Controversy	27.28	25	4.97092	0.99418
	Perception of Maggi After Controversy	14.76	25	5.14198	1.02840

Table 13: Paired Samples Test (Perception about Maggi across Gender: before and after controversy)

		Paired Differences					T	df	Sig. (2-tailed)
Mean		Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Pair 1	Perception of Maggi Before Controversy - Perception of Maggi After Controversy	12.52	6.26578	1.25316	9.93361	15.10639	9.991	24	0.000

At significance level of 1%, Paired t-test result shows p value is less than 1%. This reveals a statistically significant difference in perception about Maggi before and after controversy, in case of males. On the basis of mean value, it is concluded that respondent belonging to this group have good perception before controversy which turned bad after controversy.

Table 14: Paired Samples Statistics (Perception about Maggi amongst Females: before and after controversy)

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Perception of Maggi Before Controversy	27.5172	29	4.12848	0.76664
	Perception of Maggi After Controversy	17.9655	29	7.05328	1.30976

Secondly, Paired t-test was run on the female respondents. According to the scale, mean score of Pre-controversy perception about Maggi is 27.5172 and standard deviation is 4.12848. This means Pre- controversy perception about Maggi is very good. Mean score of Post- controversy perception about Maggi is 17.9655 and standard deviation is 7.05328. This means Post- controversy perception about Maggi is bad of this group.

Table 15: Paired Samples Test (Perception about Maggi amongst Females: before and after controversy)

		Paired Differences					T	df	Sig. (2-tailed)
Mean		Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Pair 1	Perception of Maggi Before Controversy - Perception of Maggi After Controversy	9.55172	7.12434	1.32296	6.84177	12.26168	7.22	28	0.000

At significance level of 1%, paired t-test result shows p value is less than 1%. This shows that there is a statistically significant difference in perception about Maggi before and after controversy of females at a significance level of 1%. On the basis of mean value, it is concluded that female respondents had good perception before controversy which turns bad after controversy. Lastly, mean difference (12.5200) in first group (males) is more than mean difference (9.55172) in second group (females). It means controversy affect is more on males compared to females.

Perception about Maggi across Marital Status: Before and After Controversy

In this part of study, paired "T" test is applied to capture effect of marital status on perception about Maggi pre-post controversy. Firstly, paired t-test was run on the single (not married) respondents. According to our scale, mean score of pre- controversy perception about Maggi is 27.3103 and standard deviation is 4.45696. This means pre- controversy perception about Maggi is good. Mean score of post- controversy perception about Maggi is 17.2414 and standard deviation is 6.6957. This means post- controversy perception about Maggi is bad.

Table 16: Paired Samples Statistics (Perception about Maggi amongst Singles: before and after controversy)

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Perception of Maggi After Controversy	27.3103	29	4.45696	0.82764
	Perception of Maggi After Controversy	17.2414	29	6.69571	1.24336

Table 17: Paired Samples Test (Perception about Maggi amongst Singles: before and after controversy)

			Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference						
				Lower	Upper					
Pair 1	Perception of Maggi After Controversy - Perception of Maggi After Controversy	10.06897	7.5258	1.3975	7.2063	12.93163		7.205	28	0.00

At significance level of 1%, paired t-test result shows p value is less than 1%. This reveals a statistically significant difference in perception about Maggi before and after controversy of single status respondents. On the basis of mean value, it is concluded that respondent belonging to this group had good perception before controversy which turned bad after controversy.

Table 18: Paired Samples Statistics (Perception about Maggi amongst Married: before and after controversy)

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Perception of Maggi After Controversy	27.5200	25	4.62889	0.92578
	Perception of Maggi After Controversy	15.6000	25	6.03462	1.20692

Secondly, paired t-test was run on married respondents. According to our scale, mean score of Pre-controversy perception about Maggi is 27.52 and standard deviation is 4.6288. This means Pre-controversy perception about Maggi is very good. Mean score of post- controversy perception about Maggi is 15.6 and standard deviation is 6.03462. This means post- controversy perception about Maggi is bad of this group.

Table 19: Paired Samples Test (Perception about Maggi amongst Married: before and after controversy)

				Paired Differences					
					95% Confidence Interval of the Difference				
Mean		Std. Deviation	Std. Error Mean			t	df	Sig. (2-tailed)
				Lower	Upper				
Pair 1	Perception of Maggi After Controversy - Perception of Maggi After Controversy	11.92	5.95063	1.19013	9.4637	14.3763	10.016	24	0.000

At significance level of 1%, paired t-test result shows p value is less than 1%. This reveals a statistically significant difference in perception about Maggi before and after controversy of married respondents at a significance level of 1%. On the basis of mean value, it is concluded that respondent belonging to this group had good perception before controversy which turned bad after controversy. Lastly mean difference (10.06897) in first group (singles) is less than mean difference (11.9200) in second group (married). It means controversy affect is more on married respondents compared to singles.

Table 20: Reason of association with Maggi before controversy

		Easy to cook	Variety	High quality	Lack of substitutes	Advertisement	Taste	Easy Avail- abil- ity	Healthy Food	Brand loyalty
N	Valid	59	59	59	58	57	58	58	59	58
	Missing	5	5	5	6	7	6	6	5	6
Mean		4.6102	3.7288	3.7797	3.3793	3.7895	4.0690	4.3793	2.9492	3.7414
Median		5.0000	4.0000	4.0000	3.0000	4.0000	4.0000	5.0000	3.0000	4.0000
Mode		5.00	4.00	4.00	2.00[a]	4.00	4.00	5.00	3.00	4.00
a. Multiple modes exist. The smallest value is shown										

Table 21: Reason of association with Maggi after controversy

		Easy to Cook	Variety	High quality	Lack of substitutes	Advertisement	Taste	Easy Availability	Healthy Food	Brand loyalty
N	Valid	55	55	56	54	53	54	54	56	55
	Missing	9	9	8	10	11	10	10	8	9
Mean		4.2909	3.2182	2.4286	3.0000	2.5472	3.2963	2.8704	1.8571	2.2545

(Continued...)

Median	5.0000	3.0000	2.0000	3.0000	2.0000	3.0000	3.0000	1.0000	2.0000
Mode	5.00	3.00	2.00[a]	3.00	2.00	4.00[a]	1.00	1.00	1.00
a. Multiple modes exist. The smallest value is shown									

On the basis of mode value result in Table 1, there were various reasons to associate with Maggi like easy of cooking, variety, high quality, taste, health benefit (atta nodles), brand royalty, easy availability etc.

On the basis of mode value result showing in Table 2, there are various reasons of dissociation Maggi after controversy. First and foremost is Quality: Perception of quality has declined owing to disclosure of harmful substances in Maggi by apex food regulators. Secondly, lack of substitute: before news perceived quality was very high so people find no substitute at that level of quality. Now as respondents feel quality is low, so at this level of quality, it's easy to find substitute. Thirdly, after controversy outlook towards advertisement has also changed as people feel cheated. Fourthly, after controversy, people also find that availability of Maggi is low owing to the ban on the product. So, few people who wanted to consume had to dissociate with the brand because of unavailability. Lastly, people don't find Maggi a healthy product and their brand loyalty has disappeared amidst allegations of harmful health effects.

Conclusion

The research findings are consistent with the somber national sentiment. Perception of Maggi has taken a huge dent across consumers belonging to different age groups, gender and marital status. Before controversy, perception of Maggi was very good amongst all the demographic sections and turned bad after controversy. Age of consumers has a significant impact on perception and even before controversy, Maggi was more popular amongst the youth and with increase in age, perception of Maggi went towards the downside. This is reflective of the fact that children and college going students prefer Maggi as a quick 2-minute hunger solution; whereas the adults have always been vary of this product. However, after controversy, across all age groups perceptions of Maggi has gone down. This shows that even the young are conscious of the health risk and are willing to let go of their favourite snack due to controversy.

Across gender, both male and female respondents have bad perception of Maggi after controversy. However, controversy seems to have impacted male respondents more than female respondents. Lastly, Maggi enjoyed a good reputation amongst single and married respondents alike before controversy which turned bad across both the groups. However, perception of married persons is worse than singles, which may be due to the fact that singles depended more on instant noodles and hence haven't changed their perception by a huge margin.

Limitations of the Study and Scope for Further Research

The sample size is small and the study is restricted to Delhi residents only. Further research can be done by increasing the sample size and undertaking a countrywide study. Moreover, consumer perception and buying behavior can be analyzed once the product is relaunched.

References

Balakrishnan, R., & Bapna, A. (2015, June 10). Maggi in a soup: A case study of how not to handle a crisis. *The Economic Times*. Retrieved from

http://economictimes.indiatimes.com/articleshow/47599502.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst.

Coca-Cola India (2004). Tuck School of Business Dartmouth (2004). Retrieved from http://mba.tuck.dartmouth.edu/pdf/2004-1-0085.pdf

Ferencic, M., & Wolfing, A. (2013). *Impact of quality inconsistency on brand loyalty.* Marketing in a dynamic environment. Academic & Practical Insights, 23rd CROMAR Congress Proceedings.

Haider, U. M., Jan, A. F., & Jan, F. M. (2013). Factors Affecting Brand Preferences: A Comparative Study of McDonald's and KFC. *Abasyn Journal of Social Sciences, 5*(2), 28-42.

Hills, J., & Welford, R. (2005). Case Study: Coca Cola and Water in India, *Corporate Social Responsibility & Environmental Management,12*(2), 168-177.

Maggi. In *Wikipedia*. Retrieved from https://en.wikipedia.org/wiki/Maggi

Puri, B., & Clark, E. S. (April 2012). How to Transform Consumer Opinion when Disaster Strikes / The 2003 Cadbury India Worm Infestation . *Reflections from practice : Kraft foods* . Retrieved from http://fletcher.tufts.edu/~/media/Fletcher/Microsites/CEME/pubs/reflections/Cadbury%20Case%20Final%202012.pdf '

Saraswathy, M. (2013, Mar 8). For Indian consumers, it is safety first, brand later*. The Business Standard*. Retrieved from http://www.business-standard.com/article/companies/for-indian-consumers-it-is-safety-first-brand-later-113030800084_1.html.

Sharma, T., & Narwal, M. (2006). Managing Business Crises: The CSR Perspective. *Social Responsibility Journal*, *2*(2), 124-130

Souiden, N., & Pons, F. (2009). Product recall crisis management: the impact on manufacturer's image, consumer loyalty and purchase intention. *Journal of Product & Brand Management*, *18*(2), 106-114.

Authors' Profile

Narander Kumar Nigam, an alumnus of Shri Ram College of Commerce, Delhi University, India, started his career in the corporate world after finishing graduation. He has more than 3 years of professional experience in the field in the finance particularly derivatives after which he pursued post-graduation from Department of Commerce, Delhi University, India. He switched from corporate to academics and started teaching at his alma mater. His specialization is Finance (Derivatives) and he has published research papers on contemporary issues in reputed journals.

Saumya Jain, an alumnus of Shri Ram College of Commerce, Delhi University, India, started her teaching career from Shaheed Bhagat Singh College and later joined her alma mater. Her areas of interest include accountancy, financial management, taxation and corporate governance. Her research papers in the field of corporate social responsibility, corporate governance and human resource management have been published in reputed national and international journals.