# A Study on Relationship between Health Consciousness and Consumer Behavior towards Ice creams 

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#### Abstract

The purpose of this paper is to know about the attitude of health conscious consumers about ice creams. The research model for this study had been developed based on theory of planned behavior (TPB). The independent factors considered are subjective norms, perceived behavioral control, and health consciousness. The independent factors are attitude, intention and purchase frequency. The sample size is 140 and regression analysis was used to test the hypothesis formulated. It is found from the study that health conscious consumers do not have positive attitude towards ice creams. The managerial implications are explained based on the findings from the study.


## KEYWORDS : Consumer behavior, behavioral intention, consumer attitude, health

## Introduction

The most delicious and popular dessert item is ice cream. The ice cream market in India is estimated to be over INR 4,000 crores, and is growing at a rate of $15-20 \%$ year-on-year. It is projected that by 2019, the market will reach around INR 6,198 crores (Business Wire, 2016). Earlier ice creams used to high on sales only in summer season but it had become favorite dessert even in winter season also in recent years (Progressive Grocer, 2014). The tastes and preferences of consumers are dynamic and economic status of people has changed a lot and people are likely to spend more money on specialty food products. The ice cream market is growing at approximately 19 percent per year(Mishra, 2014). At present in India ice cream business is at nascent stage and it is going to become largest market because Indian would be the largest producer and consumer of milk. The most popular ice cream brands in India are Vadilal, Kwality Walls, Mother Dairy, Amul and Baskin-Robbins etc (Scoop Hub, 2016).

## Research Objectives

1. To study consumer behavior with regard to consumption of ice creams.
2. To know influence of selected factors on consumer intention and purchase frequency of ice creams.

## Literature Review

The consumers' preferences and acceptance of ice cream products depend on factors like quality attributes, brand satisfaction, trust in manufacturer and ice cream mixture attributes (Topcu \& Uzundumlu, 2012). According to Bell and Marshall (2003) high food involvement consumers have capability to food acquisition, preparation, cooking, eating and disposal compared to low food involvement consumers. The taste, quality and flavor of ice creams have an impact on consumers' preferences towards various brands of ice creams (Kumar, Sivaram, \& Dixit, 2016). Theory of Planned Behavior (TPB) model had been adopted by various researchers while studying consumer behavior towards food products by modifying the basic model according to their situation (Psouni et al, 2016; Verbeke and Vackier, 2012). Silva et al (2014) have explained about perception of consumers towards various concepts of ice creams like zero sugar, zero fat, enriched with omega etc from the perspective of health conscious consumers. (Silva, Minim, Ferreira, Souza, Moraes, \& Minim, 2014).

## Research Methodology

The primary data is collected through structured questionnaire and
the sample size for the study is 140 . The random sampling method had been implemented for collection of primary data. The secondary data had been collected from journals, magazines, electronic sources and books etc. The measurement scale consists of six constructs which are mentioned in Table 1. The items for each construct are adapted from previous studies, further the items under each construct are modified according to the need of this study. The items are measured using 5-point Likert type scale. The demographic profile of respondents is collected by using three variables which are gender, age group and occupation. The research model for this study had been developed based on Theory of Planned Behavior (TPB). The TPB is more suitable to predict the behavioral intention of consumers towards food products (Ajzen, 2015). The health conscious ( HC ) construct was added to the model and some factors were not considered which are in the originalTPM. However, the model considered in the present study does not lose the essence ofTPB and Figure 1 shows research model of this study.

Table 1: Measurement Scale Constructs, Items and Sources

| S.N <br> $\mathbf{0}$ | Construct | Items | Mean | Cronbac <br> h's <br> Alpha | Source <br> of Items |
| :---: | :--- | :--- | :---: | :---: | :--- |
| 1 | Perceived <br> Behavioral <br> Control <br> (PBC) | 1. It is totally up to <br> me whether I will <br> buy/eat ice creams. <br> 2. For me <br> eating/buying ice <br> cream is | 4.09 | 0.88 | Psouni <br> et al <br> $(2016)$ |
| 2 | Subjective <br> Norms (SN) | 1. My family thinks <br> that I should <br> eat/buy ice cream <br> 2. My friends think <br> that I should <br> eat/buy ice cream <br> 3. Advertisements <br> about ice creams <br> encourages me to <br> eat/buy more ice <br> creams | 3.46 | 0.67 | Verbeke <br> and <br> Vackier <br> $(2005)$ |
| 3 | Consumer <br> Attitude (CA) | 1. Eating ice cream <br> is a good idea <br> 2. I like to eat/buy <br> ice creams | 3.60 | 0.62 | Lada et <br> al (2009) |


| 4 | Health <br> Consciousne <br> ss (HC) | 1. I choose food <br> carefully to ensure <br> good health <br> 2. I think of myself <br> as a health- <br> conscious <br> consumer <br> 3.1 think often <br> about health issues | 3.90 | 0.80 | Tarkiain <br> en and <br> Sundqvi <br> st (2005) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 5 | Behavioral <br> Intention (BI) | 1. I plan to buy/eat <br> ice cream in near <br> future. <br> 2. I am likely to <br> eat/buy ice cream <br> in future <br> 3. I will eat/buy ice <br> creams | 3.77 | 0.93 | Lada et <br> al (2009) |
| 6 | Purchasing <br> Frequency <br> (PF) | 1. How often you <br> eat ice creams <br> 2. How often you <br> visit ice cream <br> parlors to eat/buy <br> ice creams? | 3.17 | 0.90 | Tarkiain <br> en and <br> Sundqvi <br> st (2005) |

(Source: Developed by the researcher)


Figure 1: Research model of this study
(Source: Developed by the researcher)

## Data Analysis

Out of total 140 respondents 58 percent of the respondents are male and 42 percent of them are female. From the total respondents the occupation of 4 percent respondents is business, 54 percent are employees, 9 percent are students and 33 percent are students. From the perspective of 'age group' 51 percent of respondents are between 15 to 25 years, 26 percent belongs to 26 to 35 years, 19 percent belongs to 36 to 45 years and 4 percent belong to above 45 years age group. The majority of the respondents belong to 15 to 25 years age group.

## Table 2: Regression Coefficients ${ }^{\text {a }}$

| Model |  | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | 1.177 | . 505 |  | 2.331 | . 021 |
|  | SN | . 435 | . 079 | . 411 | 5.492 | . 000 |
|  | PBC | . 286 | . 085 | . 252 | 3.368 | . 001 |
|  | HC | -. 065 | . 080 | -. 059 | -. 812 | . 418 |
| a. Dependent Variable: CA |  |  |  |  |  |  |

## (Source:SPSS Output)

H1: There is an association between health consciousness and consumer attitude towards ice creams

From Table 2, it can be stated that hypothesis H 1 is rejected because 'p'value for HC is 0.41 which is more than 0.05 . Hence there is no significant relationship between HC and CA .

H2: There is an association between subjective norms and consumerattitude.

According to Table 2, hypothesis H 2 is accepted because ' $p$ ' value for SN is 0.00 which is less than 0.05 , hence there is significant relationship between SN and CA .

H3: There is an association between perceived behavioral control and consumer attitude.

From Table 2, it can be stated that H3 is accepted because the ' $p$ ' value of $P B C$ is 0.00 which is less than 0.05 . Hence there is significant relationship between $P B C$ and $C A$.

Table 3: Regression Coefficients ${ }^{\text {a }}$

| Model | Unstandardized <br> Coefficients |  | Standardized <br> Coefficients | t | Sig. |  |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  | B | Std. Error | Beta |  |  |
| 1 | (Constant) | .856 | .176 |  | 4.854 | .000 |
|  | CA | .811 | .047 | .828 | 17.376 | .000 |
| a. Dependent Variable: BI |  |  |  |  |  |  |

(Source: SPSS Output)
Table 4: Regression Coefficients ${ }^{\text {a }}$

| Model | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | B | Std. Error | Beta |  |  |
| 1 (Constant) | . 973 | . 284 |  | 3.419 | . 001 |
| BI | . 583 | . 072 | . 567 | 8.079 | . 000 |
| a. Dependent Variable: PF |  |  |  |  |  |

## (Source: SPSS Output)

H4: The consumer attitude towards ice creams positively impacts behavioral intention

From Table 3, it can be stated that hypothesis H 4 is accepted because ' $p$ ' value for CA is 0.00 which is less than 0.05 . Hence CA positively influences BI

H5: There is an association between behavioral intention and purchase frequency.

From Table 4, it is found that hypothesis H 5 is accepted because ' p ' value for BI is 0.00 which is than 0.05 . Therefore there is significant relationship exists between BI and PF .

## Discussion and Conclusion

The consumers' health consciousness (HC) does not positively influence their attitude towards consumption of ice creams. The perceived behavioral control (PBC) and subjective norms (SN) are positively influencing consumer attitude towards ice creams. Further the consumer attitude (CA) has a positive influence on their behavioral intention. It is also found from this study that behavioral intention (BI) is leading to purchase frequency (PF). Even though ice cream is a delicious food product over consumption may lead to variety of health issues. Hence health conscious people may not have positive attitude towards ice creams.

## Managerial Implications

The marketers need to develop customized ice creams products like zero fat ice creams, sugar free ice creams and new flavors etc to attract even health conscious consumers. Due to various reasons like pollution and development of various diseases etc people are becoming health conscious therefore customized ice creams can be developed for targeting the health conscious consumers.

Future Research

The weather has an impact on consumer spending (Murray, Finn, Leszczyc, \& Muro, 2008). Hence the impact of weather on ice cream consumption behavior can be studied by future researchers. There are other factors like availability and accessibility of ice creams which need to be considered in analyzing consumer behavior towards ice creams. The impact of brand on consumer purchase intention can also be studied. The impact of price and advertisements can be researched and effective marketing strategies can be suggested to marketers.

## References

1. Ajzen, I. (2015). Consumer attitudes and behavior: the theory of planned behavior applied to food consumption decisions. Rivista Di Economia Agraria, 70 (2), 121-138.
2. Bell, R., \& Marshall, D. W. (2003). The construct of food involvement in behavioral research: scale development and validation. Appetite, 40, 235-244.
3. Business Wire. (2016, August 11). Study of India's Ice Cream Market 2016 - Research and Markets. Retrieved January 5, 2017, from Business Wire:
http://www.businesswire.com/news/home/20160811005927/en/Study-I ndias-Ice-Cream-Market-2016--
4. Kumar, S., Sivaram, M., \& Dixit, P. K. (2016). Factors influencing consumption pattern of ice cream in Bengaluru market. Indian Journal of Dairy Science, 69 (4), 492-497.
5. Lada, S., Tanakinjal, G. H., \& Amin, H. (2009). Prediction intention to choose halal products using theory og reasoned action. International Journal of Islamic and Middle Eastern Finance and Management, 2(1), 66-76.
6. Mishra, A. (2014, March 2). There's Always Room for More. Retrieved January 5, 2017, from Business Today:
http://www.businesstoday.in/magazine/features/global-and-indian-ice-cream-companies-strategy-for-demand/story/ 203176.html
7. Murray, K. B., Finn, A., Leszczyc, P. P., \& Muro, F. D. (2008). The Effect of Weather on Consumer Spending. Advances in Consumer Research, 35, 697-698.
8. Progressive Grocer. (2014, February 6). Ice-cream market in India. Retrieved January 5, 2017, from Progressive Grocer:
http://www.indiaretailing.com/2014/02/06/food/food-grocery/ ice-cream-market-in-india/
9. Psouni, S., Hassandra, M., \& Theodorakis, Y. (2016). Exercise and Healthy Eating Intentions and Behaviors Normal Weight and Overweight/ Obese Adults. Psychology, 7, 598-611.
10. Scoop Hub. (2016). Top 10 Best Ice Cream Brands in India 2016. Retrieved January 5, 2017, from Scoop Hub:
http://scoophub.in/top-10-best-ice-cream-brands-in-india/
11. Silva, V. M., Minim, V. P., Ferreira, M. A., Souza, P. H., Moraes, L. E., \& Minim, L. A. (2014). Study of perception of consumers in relation to different ice cream concepts. Food Quality and Preference, 36, 161-168.
12. Tarkiainen, A., \& Sundqvist, S. (2005). Subjective norms, attitudes and intnetions of Finnish consumers in buying organic food. British Food Journal, 107 (11), 808-822.
13. Topcu, Y., \& Uzundumlu, A. S. (2012). Turkish consumers' purchase attitude and behaviours towards Kahramanmaras type ice cream as a local branded product. African Journal of Business Management, 6(34), 9695-9703.
14. Verbeke, W., \& Vackier, I. (2005). Individual determinants of fish consumption: application of the theory of planned behavior. Appetite, 44, 67-82.
