



A STUDY IMPACT OF MISLEADING PRODUCT LABELS ON CONSUMER AWARENESS AND PURCHASE DECISIONS AMONG COLLEGE STUDENTS IN NAVI MUMBAI

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Abstract:

College students are a crucial segment of the consumer market in our country. Several students have felt misled and confused by deceptive product labels in the modern marketplace. Consumers can make more informed and ethical purchasing decisions when they are fully aware of the products they buy. Each economy's success depends on the role that informed consumers play in it, shaping market trends and demanding corporate accountability. Therefore, the level of consumer awareness among college students regarding misleading labels is a matter for concern. This paper will find out the impact of misleading product labels on consumer awareness and how it influences the purchase decisions of college students in the Navi Mumbai region.

Keywords: *College Students, Misleading Labels, Consumer Awareness, Purchase Decisions.*

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Introduction:

Research on consumer behaviour among college students has become a matter of concern, especially in an era of information overload and aggressive marketing. In recent years, there has been a steady increase in the use of misleading and deceptive product labels. In disciplines like marketing and consumer studies, for example, consumer awareness is one of the most widely studied and enthusiastically explored developments. Any market's participants must be empowered with accurate information in order to make effective choices. Information is an essential and contributing factor to consumer awareness. Aware consumers provide better market feedback and drive superior outcomes, both of which boost the overall health and productivity of the economy. When it comes to the effectiveness and efficiency of any market, consumer awareness is crucial. College students are a crucial segment of the consumer market in our country.

Several students have felt misled and confused by deceptive product labels in the modern marketplace. Consumers can be more effective in their purchasing role when fully aware of the products they buy. Each economy's success depends on the role that informed consumers play in it, shaping market trends and demanding corporate accountability. Therefore, the level of consumer awareness among college students regarding misleading labels is a matter for concern.

Misleading product Labels :

It refers to any information, claim, design, or representation on a product package that creates a false, exaggerated, or incomplete impression about the product's nature, quality, composition, or benefits. Such labels may not always contain direct false statements; instead, they often rely on ambiguous wording, selective disclosure of information, or emphasis on certain positive attributes while downplaying less favourable aspects. Misleading labels

can influence consumer perception and decision-making by shaping assumptions about health value, safety, or overall quality, thereby affecting purchasing behaviour.

Definitions:

According to Kotler and Keller (2016), deceptive marketing practices include packaging or labeling that misrepresents a product's features, benefits, or performance, thereby influencing consumer perception unfairly.

Schiffman and Wisenblit (2015) defined consumer awareness as the ability to gather, process, and evaluate information in order to make informed purchase decisions.

These concepts form the basis for analysing the extent to which deceptive labeling practices affect awareness levels and purchasing behaviour among young consumers.

Literature Review:

Jennifer L Pomeranz (2013) stated that the FDA has limited authority over misleading food labels and current regulations rely heavily on voluntary compliance. The study highlighted that deceptive health and nutrient claims reduce consumer trust and weaken public health protection, emphasizing the need for stronger regulatory control.

AlBlooshi S, Smail L, Aldayyani A, Zeb F, Ibrahim A. (2025) conducted a study among university students to examine food label awareness and usage. The findings revealed high awareness levels but inconsistent label-reading behaviour, with many students relying more on visual cues than detailed nutritional facts.

M A, Varakumari E, Thozhanenjan I, M V, Pandian S, Bhandari A, Grace A. (2025) surveyed young adults, mainly medical students, to assess understanding of nutrition labels. The study found moderate awareness and scepticism toward marketing

claims, but limited regular analysis of detailed nutritional information.

Kansal S, Raj A, Pedapanga N, Worsley A, Rathi N. (2023) examined rural adolescents' food habits and label-reading behaviour. The study reported frequent consumption of packaged snacks and low engagement with nutrition information, mainly due to language barriers and limited awareness.

Pahlani M, Narendra Talati K, Lopez-Arana S, Narayanan P (2025) analysed consumer comprehension of nutrition facts and front-of-pack labels. The research showed that technical jargon and English-language barriers reduce understanding, recommending simplified and multilingual labelling systems.

Butler, J. M., & Vossler, C. A. (2018) conducted an experimental study on the impact of "natural" claims. The results showed that such claims increased consumers' willingness to pay despite unclear regulatory definitions, leading to misperceptions about product healthfulness.

Hastak, M., & Mazis, M. B. (2011) developed a framework explaining misleading advertising and labelling practices. The study identified exaggeration, omission, and linguistic manipulation as major factors influencing consumer misinterpretation of product benefits.

Prates, A. C., et al. (2022) examined the effect of front-of-package nutrition claims on purchase intention. The study identified a "health halo effect," where positive claims influenced consumers to perceive products as healthier, even when nutritional content contradicted such claims.

Research Gap:

From the above literature review it can be derived that numerous studies were conducted on misleading product labels and consumer awareness but not many studies included the impact of misleading labels, the consumer awareness of college students and how it

affected their purchase decisions. The purpose of this study in particular is to understand the impact of misleading product labels and how it affects the consumer awareness and purchase decisions around college students in Navi Mumbai.

Significance of the Study:

This study is significant as it examines how misleading product labels influence consumer awareness and purchase decisions among college students, a crucial and growing consumer segment. By analysing the relationship between labeling practices and buying behaviour, the research highlights the extent to which deceptive or unclear information affects informed decision-making.

Scope of the Study:

1. Conceptual Scope

The study focuses on how misleading product labels, particularly health claims and packaging messages, influence consumer awareness and purchase decisions.

2. Geographical Scope and Population

The research is limited to undergraduate and postgraduate college students in Navi Mumbai and does not extend to other age groups or regions.

3. Product Scope

The study is confined to packaged food and beverage products that commonly display nutritional and health-related claims.

Research Methodology:

1. Class of Respondents

For the purpose of this study, a total of 100 college students from Navi Mumbai were selected as respondents.

2. Sample Size

The study was conducted on a sample of 100

respondents studying in various colleges in Navi Mumbai.

3. Sampling Method

For the collection of primary data, a non-probability convenience sampling method was used.

4. Method of Data Collection

In this research, both primary and secondary data were used.

1. Primary Data

Primary data was collected through a structured questionnaire using Google Forms from 100 college students in Navi Mumbai.

2. Secondary Data

Secondary data was collected from books, journals, research papers, websites, government reports, and newspaper articles related to food labelling regulations, consumer awareness, and misleading marketing practices.

Objectives of the Study:

- To analyse the influence of misleading product labels on purchase decisions of college students in Navi Mumbai.
- To assess the level of consumer awareness among students regarding misleading or exaggerated product claims.
- To assess whether students check product labels thoroughly before making a purchase.

Hypothesis:

H1: Misleading product labels have a significant impact on consumer awareness and purchase decisions among college students

H0: Misleading product labels have no significant impact on consumer awareness and purchase decisions among college students.

Results:**Gender-wise classification**

Gender	Respondents	Percentage
Male	15	15
Female	50	50
Prefer Not To Say	35	35
Total	100	100

According to the above table, the majority of respondents were female (50%), followed by 35% who preferred not to disclose their gender and 15% male respondents, indicating that female perspectives are more prominently represented in the study.

Age-wise classification

Age	Respondents	Percentage (%)
<18	20	20
18-24	67	67
25-30	13	13
Total	100	100

According to the above table, most respondents (67%) fall within the 18–24 age group, confirming that the study primarily represents young college students, while 20% are below 18 and 13% are between 25–30 years.

Label-Checking Habit

Response	Respondents	Percentage
Always	23	23
Sometimes	52	52
Rarely	21	21
Never	4	4
Total	100	100

According to the above table, 52% of respondents sometimes check food labels before purchasing, while only 23% always do so, suggesting that label reading is a common but inconsistent habit among students.

Understanding of Nutrition Table

Level of Understanding	Respondents	Percentage
Yes, clearly	28	28
Somewhat	44	44
Not really	24	24
Not at all	4	4
Total	100	100

According to the above table, 44% of respondents somewhat understand the nutrition table, but only 28% clearly understand it, indicating moderate awareness and limited detailed comprehension of nutritional information.

Confusion About Labels

Level of Confusion	Respondents	Percentage
Sometimes	46	46
Yes, frequently	32	32
Rarely	19	19
Never	3	3
Total	100	100

According to the above table, a significant proportion of respondents experience confusion when reading food labels, with 46% sometimes feeling confused and 32% frequently feeling confused, highlighting the complexity of label information.

Lack of Awareness About Legal Misleading Labels

Awareness Level	Respondents	Percentage
No	56	56
Yes	31	31
Maybe	13	13
Total	100	100

According to the above table, 56% of respondents were not aware that food labels can be misleading even if legally permitted, reflecting a considerable gap in awareness regarding labeling regulations.

Influence of Front-of-Pack Claims

Influence Frequency	Respondents	Percentage
Sometimes	45	45
Yes, many times	29	29
Rarely	20	20
Never	6	6
Total	100	100

According to the above table, 45% of respondents are sometimes influenced and 29% are influenced many times by front-of-pack claims, demonstrating the strong impact of highlighted marketing messages on purchase decisions.

Behavioural Consequence

Response	No. of Respondents	Percentage (%)
Yes (Stopped buying)	44	44
No	42	42
Maybe	14	14
Total	100	100

According to the above table, 44% of respondents have stopped buying a product after discovering its label was misleading, indicating that deceptive labeling can directly influence consumer behaviour and purchasing patterns.

Hypothesis Testing:

The hypothesis was tested using the Chi–Square Test of Association.

Table 1: Observed Values

Awareness Level	Many Times	Sometimes	Rarely	Never	Total
No	9	24	17	6	56
Yes	16	13	2	0	31
Maybe	4	8	1	0	13
Total	29	45	20	6	100

Table 2: Expected Values

Awareness Level	Many Times	Sometimes	Rarely	Never	Total
No	16.24	25.20	11.20	3.36	56
Yes	8.99	13.95	6.20	1.86	31
Maybe	3.77	5.85	2.60	0.78	13
Total	29	45	20	6	100

Using formula:

$$\chi^2 = \sum (O - E)^2 / E$$

After computing for all 12 cells:

Chi–Square Calculated Value = 21.17

The calculated Chi-square value (21.17) is greater than the critical value (12.59) at 5% level of significance with 6 degrees of freedom. Therefore, the null hypothesis is rejected. This indicates that there is a significant association between consumer awareness of misleading labels and purchase influence among college students. Hence, misleading product labels significantly impact consumer awareness and purchase decisions.

Conclusion:

Based on the findings of the study, it can be concluded that misleading product labels have a noticeable impact on consumer awareness and purchase decisions among college students in Navi Mumbai. The majority of respondents belong to the 18–24 age group (67%) and 50% of the participants were female, indicating that the study largely reflects the perceptions of young adult

consumers who are active buyers of packaged food products. The data shows that label-checking is not a consistent habit, as 52% of respondents reported that they only sometimes check food labels before purchasing. This suggests that while students show some level of interest in product information, it is not a regular or disciplined practice. In terms of understanding nutritional information, only 28% of

respondents clearly understand the nutrition table, highlighting limited in-depth awareness. This is further supported by the finding that 46% of respondents sometimes feel confused while reading labels, indicating that product information may not always be easily interpretable. A significant concern revealed by the study is that 56% of respondents are unaware that certain misleading claims can still be legally permitted, demonstrating a substantial gap in knowledge regarding labeling regulations. Front-of-pack claims also play a strong role in influencing purchase behaviour, with 45% of respondents admitting they are sometimes influenced by such claims. Moreover, 44% of respondents stated that they have stopped buying a product after discovering misleading information, showing that deceptive labeling can directly affect consumer trust and purchasing decisions.

Hence, the study concludes that although young consumers show moderate engagement with product labels, limited understanding, frequent confusion, and lack of regulatory awareness make them vulnerable to misleading claims, which ultimately influence their buying behaviour

Limitations of the Study:

1. The study relies on self-reported responses, which may be influenced by personal bias or inaccurate recall.
2. Time constraints of the research period may limit depth of analysis.
3. The study is limited to college students in Navi Mumbai and cannot be generalised to other regions or age groups.
4. The research majorly focuses on packaged food and beverage products, excluding other product categories.
5. The research does not conduct experimental testing to establish direct causation, only perceived relationships.

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