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INVESTIGATING THE PERCEPTUAL AND ATTITUDINAL RESPONSES OF CONSUMERS TOWARD HEALTH HALO LABELS IN FOOD PRODUCTS: A KOLKATA-BASED STUDY

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Abstract: *A health halo effect is known to evolve when consumers are presented with a solitary nutritional product-centric attribute, and they typically tend to overestimate the same over all the other unmentioned product attributes. The health halo label relatively plays with the mind of the target customers, pillared on the labelling of the food product. This, subsequently is perceived by them as a positive attribute about the food product. The current study is an attempt to probe into the manner in which versatile health halo labels imprinted on food products shape the perceptions and attitudes of consumers, and consequently provokes them to opt for the same. The study examines the impact of certain demographic factors (such as age, gender, and occupational status) on the purchase inclinations toward food products with health halo labels imprinted on them, and further assess whether such labels trigger any significant impact in terms of purchase decision by consumers, while unravelling the plausible reasons for the same. To this end, a structured questionnaire was administered to a conveniently selected sample of 150 respondents based in the metropolitan city of Kolkata, West Bengal. The responses obtained were statistically analyzed using SPSS software, and the impact was measured using various univariate and bivariate statistical measures. The study reveals that gender, as a demographic construct, had a significant influence on the nutritional claims made by the products. In essence, the health halo labels are known to make a significant impact in altering the perceptual and attitudinal trajectories of consumers with respect to the product, thereby triggering a favorable purchase inclination toward the food products.*

Keywords: *Health Halo Labels, Nutrition, Perceptions, Attitudes, Food Products, Purchase Decision*

INTRODUCTORY OBSERVATIONS

Indian consumers, over the last decade or so, have gradually started leading healthier lifestyles (Banerji et al., 2020). In fact, exposure to social media, along with other digital platforms, have unlocked new routes to information pertaining to healthier living. Interestingly, the sudden focus on health and wellness may be attributed to an escalating recognition of the inherent need to eat right (Kennedy, 2006; Shepherd et al., 2006; Skerrett & Willett, 2010). Moreover, a miscellany of alarming health issues, ranging from respiratory and skin ailments to water-borne diseases, coupled with poor lifestyle choices and scanty access to requisite nutrition, have driven consumers to undertake certain fundamental changes in light of their purchase behavior, such as checking the ingredients finely printed on food packages, and evaluating the quality and source of ingredients used in the food (Askew, 2018; de Morais Sato et al., 2019; Euromonitor Communications, 2016). If consumers eat at a restaurant they believe to be health-centric, they assume that their food choices would be healthy as well. Such consumers have a higher chance of adding side dishes, drinks, and desserts to their order, which would lead to a greater calorie consumption. The formation of halos cannot be merely confined to 'food marketing', in that halos can be set on company image and reputation, such as exhibiting consumer social responsibility (Cho & Kim, 2012; Peloza et al., 2015). When consumers consider things advertised by firms that are represented by the standards of social stewardship, they normally accept that these organizations likewise make 'better' items and that these items are more beneficial as a rule. In the case of food, concordance with the environment is generally a positive attribute and hence, purchasers assume that they would in general benefit from items advertised by socially mindful firms (Chen, 2007).

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The current study endeavors to examine the behavioral trajectories of consumers, who typically become ensnared by the 'healthy' keywords highlighted in the title of the product, and are overwhelmed by pretentious 'healthy' labels, such as 'natural', 'organic', 'protein-rich', 'grass-fed', or 'gluten-free', to name a few. Do these terminologies persuade consumers to scrutinize the intrinsic constituents specified on the food label before making an informed purchase decision, or do they fall prey to the apparent 'marketing gimmick' often used by companies? Interestingly, the use of such 'healthy' buzzwords do not severely impact the less or moderately health-savvy consumer groups, but it archetypally influences the psyche of health-conscious consumers who favor 'health' over the 'taste' of the product (Sundar & Kardes, 2015).

In view of the above understanding, the current study aims to critically assess whether, and how, health halo labels (such as natural, organic, and so on) imprinted on brands play a role in shaping generally favorable customer attitudes toward such brands. The study further probes into whether such health halo labels (such as Diet, Zero-Sugar, Caffeine-free, and so on) favorably influence the purchase decision made by customers. Furthermore, it endeavors to ascertain whether the various demographic variables (namely, age, gender, and occupation of respondents) have any significant influence on the purchase of food products bearing health halo labels (such as low-calorie, low-sugar, expiry date, low-fat, and low-cholesterol).

BACKGROUND LITERATURE

Over the past few decades, general studies delineating the concept of halo effect in multiple contexts have been plentiful (Lucker et al., 1981; Nisbett & Wilson, 1977; Soper & Piepkorn, 2018). On the other hand, studies on health halos as a construct have been relatively scarce. The concept of a 'health halo effect' continues to emerge, as it remains a niche in academic literature. While more than a few researches have been undertaken in the past with respect to investigating the impact of health halo labels on specific brands and product items, disparate insights have been garnered, making it arduous to arrive at a meaningful theoretical foundation to the construct of health halos in the context of food products.

For instance, Sundar and Kardes (2015) observed how health halo labels, in conjunction with perceived attributes of versatile brands, trigger the perceptual as well as consumption levels of target consumers. When specific product-centric attributes are absent, consumers tend to develop multiple and subjective interpretations. Notwithstanding, when they coalesced with the health halo label, consumers are coerced into purchasing the said product(s).

In another experiment conducted by Faulkner et al. (2014), the impact of the health halo claims was tested. As a component of the research design, the test group was presented with a healthy version as well as a standardized version of a set of food products. On the one hand, the healthier alternative encompassed 'health halo claims', such as supplementary nutritional benefits and low-calorie dietary advantages. On the other hand, the regimented version comprised the high-calorie food alternatives. The experiment concluded that the food items with the 'health halo claims' were generally perceived as a 'healthier option' and triggered strong and favorable purchase intentions among consumers. It was regarded as a 'less guilty option' and as a result, consumed more in contrast to the standard version of the food items. Nevertheless, a certain fragment of the participants remained indifferent to the claims made by the food products and consequently, preferred the more obvious variable, that is, the taste of the food product. Taken as a whole, health halo claims had significant capacity to induce purchase desires among target consumers with respect to food products that boasted of higher nutritional claims.

Gezer (2018) conducted a study on functional foods and the plausible impact of health halos on the same. The study revealed that health halo claims on products had a robust influence on the consumption habits of target consumers, with dietary labels and nutritional claims catalyzing the consumption patterns and brand-switching behaviors among the consumers. Notwithstanding, dietary labels were also observed to have triggered an adverse effect on the health of consumers by hoodwinking them, given that it stimulated excessive consumption levels of the food products.

In an empirical study conducted by Whalen et al. (2018), the manner in which health halos triggered a cognitive bias among individuals was inspected. It was observed that both the product claims, specifically health-related and marketing-related, with respect to the explicit and implicit perspective, generate a persuasive milieu among customers. In fact, less healthy food items were deemed healthier with health halo labels such as 'fruit sugar' or 'organic'. The study visibly evidenced that health halo claims with 'physical activity' in television advertisements of food products successfully influenced children, among other customers, to buy the specific product. The study further revealed that children perceived the product with the health halo labels to be the healthier choice in contrast to their unlabelled counterparts.

Results however, were not always favorable in the context of kindling positive purchase behaviors among target consumers. For instance, Benson et al. (2018) demonstrated that health halo claims had a rather minuscule impact on the purchase trajectories of consumers. In effect, 'product familiarity' and 'consumer belief' were observed to be the

chief drivers of influencing consumption patterns, followed by 'product tastiness'. The research also revealed that the smartly labeled product packaging had no discernible impact on the purchase behavior of consumers, as they were very rigid toward 'tastefulness', 'belief', and 'product familiarity', which consequently shaped their buying behavior.

In another recent study conducted by Oostenbach et al. (2019), it was discerned that health halos tend to have a strong impact on consumer purchase intentions toward specific products. They are also known to simultaneously influence the tastiness of the product in the minds of the target consumers. Results concluded that various nutritional claims of the food products in question have the capability of significantly impacting consumer knowledge with respect to the 'health benefit' and 'calorie intake', while making the food with higher nutritional claims look 'healthier' and 'less tasty'. It was further concluded that the health claims made the smaller fragment appear bigger, concurrently disregarding the energy portion in the food, thus playing with the mind of the consumers. To a certain extent, the health halo was also seen to influence the consumers' 'consumption guilt', as it strongly encouraged them to purchase the product.

While most of the extant literature have probed into the potential impact of the nutritional claims on the health of various consumer segments and its capability to trigger 'consumption guilt' among them, one arena that has eluded most former researchers is the manner in which versatile health halo labels claimed by sundry fast-food chains tend to alter consumer perceptions and their attitudes toward the nutritional labels in their food offerings. Furthermore, yet another gray area remains with respect to the influence of various demographic variables on the consumption patterns of consumers toward the products' nutritional labels. The current study endeavors to draw detailed insights into which product consumers would prefer if they were presented with a rational choice, in addition to the possible reasons for the same. Accordingly, the current study has been conducted, concentrating on a young demographic age group, in the geographic setting of Kolkata (the capital city of West Bengal, India).

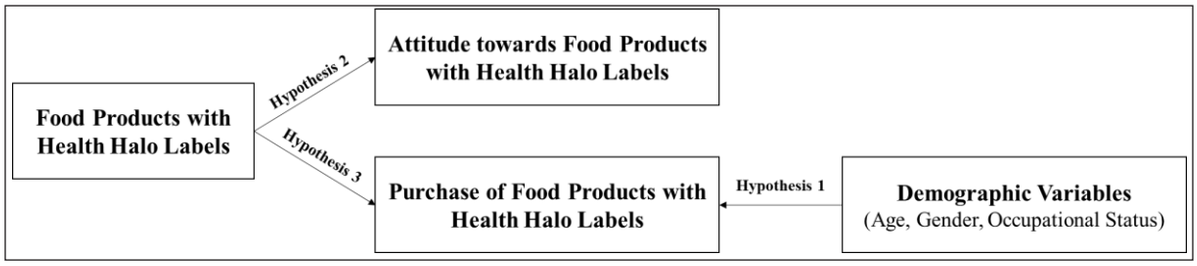
Keeping in mind the aforementioned gaps in literature, as well as the objectives of the study, the following propositions have been hypothesized:

Hypothesis 1: Demographic variables (specifically age, gender, and occupational status of respondents) have a significant impact on the purchase decision of consumers with respect to food products having health halo labels (such as low-calorie, low-sugar, expiry date, low-fat, and low-cholesterol).

Hypothesis 2: Health halo labels imprinted on a product make consumers develop generally favorable attitudes toward the said product.

Hypothesis 3: Health halo labels imprinted on a product have a significant impact on the purchase decision of consumers toward the said product.

The aforementioned hypotheses have been illustrated in the conceptual model (Fig. 1).



Source: Authors' own conceptualization

Fig. 1: Conceptual Model

METHODOLOGY

To fulfill the objectives of the current study, a descriptive research design has been used in an attempt to address the 'who', 'what', 'when', 'where', and 'how' of health halo labels in their liaison with consumer purchase behavior. The study has been conducted in the metropolitan setting of Kolkata (West Bengal, India), with a group of 150 participants largely aged below 25. The study endeavors to determine how the buying behavior of respondents may be portrayed in response to the claims made by health halo labels in food products. To generate meaningful responses, a structured questionnaire has been employed, with a total of 19 questions, categorized under three distinct segments, namely: Demographic Profile, Consumer Perceptions and Attitudes toward Health Halo Labels on Food Products, and Consumer Purchase Behavior toward such Food Products. Results have been computed using SPSS: v23. A summary of the descriptive statistics of the respondents have been depicted in Table 1.

Table 1: Descriptive Statistics

Demographic Element		Frequency	Percent	Mean	S.D.
Age of Respondents	Below 20	68	45.3	1.92	1.17
	21-30	55	36.7		
	31-40	9	06.0		
	41-50	7	04.7		
	Above 50	11	07.3		
	Total	**150**	**100.0**		
Gender of Respondents	Male	93	62.0	1.38	0.49
	Female	57	38.0		
	Total	**150**	**100.0**		
Occupational Status of Respondents	Student	117	78.0	1.63	1.29
	Self-Employed	5	03.3		
	Salaried	7	04.7		
	Homemaker	9	06.0		
	Unemployed	12	08.0		
	Total	**150**	**100.0**		

Source: Authors' own calculations

Of the 150 valid responses, the mean age was concentrated below the age group of 20 (n = 68; 45.3%). Further, the male-female ratio was observed to be 31:19. In terms of the occupational status of respondent groups, majority of the participants happened to be students (n = 117; 76.7%).

FINDINGS AND DISCUSSION

The study revealed that a majority of the respondents tend to visit the grocery stores sometimes or very often. When purchasing food products from such grocery stores, they were inquired about the informational label they endeavored to read, including the expiry date, calorie, and sugar, fat, and cholesterol contents on the outer package of the food products. It was observed that most respondents preferred to verify the 'expiry date' and the 'best before date' prior to purchasing a food item. On the other hand, other key information such as calorie-content (42%), sugar-content (40%), fat-content (40%), or cholesterol-levels (33%), were not paid much heed to by respondents. It is evident that the cognitive processing of information such as 'expiry date' and 'best before date' is relatively undemanding for respondents. Former researches also bear testimony to the fact that consumers tend to assess the durable shelf life of the food product in terms of the duration in which the food item shall successfully retain its freshness, delectableness, and nutritional significance, given apt storage criteria for the said item (Roberts, 2003; Toma et al., 2017).

The subsequent logical question that arises is whether consumers would prefer the taste of the product over considerations of health-centric parameters such as low calories, low cholesterol, and so on. As mentioned earlier, increasing number of consumers in India have started to adapt to the 'healthy' style of living by opting for products that are low in terms of calorie-content, cholesterol, sugar, or fat levels. As a direct consequence, an increasing number of food products labeled 'Zero-cholesterol' and 'Zero-gram trans-fat' are being manufactured in today's markets. The question naturally arises whether consumers would opt for the taste of the product, over and above such 'health' claims. To determine the same, a Mann-Whitney U-test was conducted to determine if there are any significant deviations in the manner in which consumers perceive the health parameters as well as the taste of the product. The value of U was calculated as 2145.50, and the Wilcoxon-W value was 4161.50. The p-value was found to be 0.045, which proved to be significant at the 5% level. This indicated that respondents tend to devote immense importance to both the taste of the product and the health considerations.

It was observed that consumers generally tend to sport favorable attitudes toward food products with health halo labels imprinted on them. Such health halo labels comprised various tags such as low-calorie, low-sugar, expiry date, low-fat, and low-cholesterol. A summarized version of the responses provided by the participants of the study have been presented in Table 2.

Table 2: Summarized Responses Indicating Consumer Attitudes toward Various Health Halo Labels

Health Halo Label	p-Value	Status	Inference Derived
Low-calorie content	0.024	Reject H_0	Respondents develop favorable attitudes toward products with 'low-calorie' imprinted on them
Low-sugar content	0.043	Reject H_0	Respondents develop favorable attitudes toward products with 'low-sugar' imprinted on them
Low-fat content	0.037	Reject H_0	Respondents develop favorable attitudes toward products with 'low-fat' imprinted on them
Low-cholesterol content	0.019	Reject H_0	Respondents develop favorable attitudes toward products with 'low-cholesterol' imprinted on them

Source: Authors' own calculations

As a logical extension to the aforementioned set of questions, respondents were presented with a scenario, where they were asked to make their purchase or consumption choices from among the various forms of Coke. The mandatory response condition compelling the respondent to enter responses to the question was revoked in the case of this particular question segment. It was noted that only 52% of the respondents (n = 78) confirmed that they would choose to purchase and consume the soft-drink brand. The remainder of the sample chose not to consume any other soft-drink brand as well, suggesting their inclination toward leading a healthy lifestyle. Interestingly, 33% of the willing respondents (n = 26) confirmed that they would prefer to consumer Diet Coke over and above the traditional Coke variant (17%; n = 13). Furthermore, 15% of the respondents (n = 12) preferred to consume the 'Zero-Sugar' variant, and 35 per cent of the respondents (n = 27) opted for the 'Caffeine-Free' variant of Coke. However, it was interesting to note that only 9 per cent of the respondents (n = 7) who were willing to purchase and consume Diet Coke seemed to be extremely familiar with the variance in sugar content that persists between a 'traditional Coke' and the 'Diet Coke' variant. On the other hand, nearly 51% (n = 40) of the respondents were completely unacquainted with the distinction between the two variants. Thus, it was generally observed that nearly 67% of the respondents preferred health halo labels such as 'Diet', 'Zero-Sugar', 'Caffeine-free'. Most of the respondents even subscribed to the fact that they would prefer other food items which had similar labels imprinted on them. As a final measure, a Kruskal Wallis test was conducted in order to assess whether health halo labels have a favorable influence on the purchase decision made by customers. The $\chi 2$-value was computed as 1.997. The p-value was calculated as 0.036, which was significant at the 5% level, suggesting that there is a significant impact of the various health-halo labels (such as Diet, Zero-Sugar, Caffeine-free, and so on) on the purchase and consumption decisions made by respondents. The overall results are summarized in Table 3.

Table 3: Summarized Responses Indicating Consumer Purchase Intentions toward Various Health Halo Labels

Health Halo Label	p-Value	Status	Inference Derived
Diet/Zero-Sugar/ Caffeine Free	0.036	Reject H_0	Respondents generally tend to purchase food products that have 'Diet', 'Zero-Sugar', or 'Caffeine-Free' imprinted on them
Natural	0.004	Reject H_0	Respondents generally tend to purchase food products that have 'Natural' imprinted on them
High-Protein	0.003	Reject H_0	Respondents generally tend to purchase food products that have 'High-Protein' imprinted on them
Organic	0.042	Reject H_0	Respondents generally tend to purchase food products that have 'Organic' imprinted on them
Fresh	0.033	Reject H_0	Respondents generally tend to purchase food products that have 'Fresh' imprinted on them

Source: Authors' own calculations

Finally, the study sought to examine whether demographic variables have any influence on the purchase decision of respondents with reference to health halo labels (such as low-calorie, low-sugar, expiry date, low-fat, and low-cholesterol). It was observed that age (p-value: 0.546; p-value>0.05) and occupational status (p-value: 0.721; p>0.05) did not have any significant impact on the purchase of food products with health halo labels imprinted on them. However, gender, as a demographic construct, had a significant impact on the purchase of such products (p-value: 0.012; p<0.05).

CONCLUSIVE DELIBERATIONS

Consumers, by and large, are looked upon as 'cognitive misers', especially in the context of consumption of food, given that they exhibit versatile cognitive biases in myriad forms. They are known to use various mental shortcuts to make faster and more resourceful purchase decisions. As observed in the context of the current study, these mental shortcuts utilized by consumers are allied to the 'health halo effect', which induces them to purchase the food products

with health halo labels imprinted on them. As a result, they often tend to overestimate the nutritional claims made by the food products, and end up purchasing the same without scientifically understanding the relative benefits of the product on their health.

The current study endeavored to examine the influence of such health halo claims on the purchase decisions of consumers based in the metropolitan setting of Kolkata. The study considered an array of health halo buzzwords and labels pertaining to enhancing the perceived nutritional value among target consumer groups, such as 'natural', 'protein', 'diet', and 'organic', to name a few. It was observed that such labels had a major impact on the attitudinal dimensions and purchase inclinations of consumers in the study. As a result, consumers were disposed to developing favorable perceptions toward food products such as Coke and its variants imprinted with 'healthy buzzwords'. Consumers were also found to devote adequate value to both the taste of the food product, as well as their inherent health considerations. Food and dietary consciousness have together revamped the manner in which consumers make their food consumption decisions. Yet, the fact cannot be ignored that over the course of time, fast-food products have matured the taste buds of consumers, and for the same reason they scout for a 'healthier' alternative, coupled with better taste, available in the market. The study further examined whether the demographic factors such as age, gender, and occupational status of consumers have any major impact on the purchase decision of consumers toward food products with health halo labels imprinted on them. While age and occupational status proved to be insignificant in the context of the current study, gender was observed to play a key role in shaping the purchase decisions. Women tend to be more internally focused, while their male counterparts are generally expected to be externally focused. Gender shapes myriad personality traits of female and male shoppers, as they exhibit visibly divergent tactics in their decision-making and purchasing behavior in the context of food products with health halo labels (Vijaya Lakshmi et al., 2017).

As it has been evidenced in the study, consumers are inclined to opt for food products, especially when they have been marketed as 'healthy'. It is indeed captivating to note that consumers pay close attention to the nutritional information, while being influenced by health-centric buzzwords, slogans, and images that make food products appear 'healthier' than they are in actuality. It may be stated with reasonable confidence that materialization of consumer impressions and judgement are influenced by such health halo claims in food products, thereby altering their perceptual cues toward the holistic 'healthfulness' of specific food products.

SCOPE FOR FURTHER RESEARCH

Over the past few decades, only a handful of erstwhile studies have been conducted, bearing in mind the various consumer biases with reference to the tag or the label with which a food product is sold. From this perspective, the current study makes an earnest attempt to furnish a robust and distinct image about the behavior of consumers, and how they typically orient their buying decisions based on a plethora of marketing gimmicks germinated by advertising and marketing professionals. Notwithstanding, as is the case with any research endeavor, the study is primarily focused on unraveling the perceptual cues of consumers with respect to the purchase and consumption of food products with imprinted health halo labels, specifically in the geographical setting of Kolkata. Given that the country houses a billion individuals with diverse cultures, belief systems, and social standards, there is potential to influence the recognition of consumers toward food products and their conduct of healthy buying. Subsequent researches can focus on covering a wider geographic expanse, with a more sizable sample, to gain an exceptionally all-encompassing perspective of the healthy buying trajectories of the population, and how they respond to health halo labels.

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