

Importance of Front Labels in Influencing Buyer Decision Making in Purchasing Juices and Other Drinks during COVID-19

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Abstract

The juice industry in India is dominated by a few brands. Routinely majority of consumers go for juices for taste or even as healthier alternatives to aerated drinks. Labels play an important role in marketing of the products. Businesses have adapted by changing their marketing mix. Labelling is one of the ways by which they have tried to nudge customers into purchases '99.99% germs killed', 'zero fat', '100% safe' are some of the frequently occurring labels on products. It becomes important to understand whether this focus on health translates to buying more products with the 'right labels.' Through primary research I would seek to find out if people have become more inclined to buy products with health and nutritional labels in this pandemic. My motivation for this research is to understand the ever-changing consumer psyche in urban-sub urban Indian markets. FOP labels have demonstrated their role in affecting buyer behaviour through previous studies. However not many studies have been done with respect to juices. Thus an empirical survey was floated with questions on four major themes: Buyer behaviour, fear of pandemic, health aspirations and labels effect. Factor analysis was done to identify which factors were of significance. Regression analysis was also performed to judge impact of variables. Additionally, retailer interviews were conducted to understand sellers' perspective of how juices were bought by customers.

Keywords: Product Labels, Labelling, COVID-19, Marketing, Packaging

Introduction

The current pandemic has compelled consumers to alter their behaviour in varying proportions across the world. People are buying impulsively, focusing on essential items and have begun prioritising healthy products. (Parthiban, K. Impact of COVID-19 on shopping behaviour of middle-class consumers.) They are trying to save more because of the future uncertainty and receding economy. However, after a certain point it has also been seen that some customers are willing to spend if they are convinced that they are doing so on healthy products, so as to build immunity.

Likewise, brands have adjusted too as soon as it became apparent that coronavirus is here to stay. They have changed their offerings and communications. There has been increased emphasis on health and hygiene. Brands are going out of the way to suggest that their products are safe to consume and edible products are being marketed as healthy and immunity boosting.

Packaging is an integral feature of the marketing mix. With increasing expenditure in research and development, even the labelling process undergoes severe brainstorming. What is written on it, how it might be perceived by the consumers, what impact it might have on sales and brand image are important questions which marketers regularly seek to answer. There might be different responses in nutritional aspect too. A label which marks the product as 'natural', 'healthy' might provoke reactions and impact purchase intention. Front-of-pack labelling began in 1987

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through NGOs like American Heart Association's Heart Guide.

To provide systematic, standardised and easily understandable information about what they are consuming is the primary purpose of Front of the Pack labels.

There can be different types of labels:

- Nutritional content based: 10% protein
- Hygiene based: "100% safe"
- Ingredient-based: "contains pure orange"

The global juice industry is worth 2,151 million dollars, hence a segment worth comprehension. In India, brands like Real, Paperboat, Safal, Amul are highly popular. Numerical values on labels might incline a consumer into believing in the efficacy of the product. Often nutritional content is posted on labels to induce customers into the purchase.

Review of Literature

In Medina-Molina, C., Rey-Moreno, M., and Perri    ez-Crist  bal, R. Analysis of the moderating effect of front-of-pack labelling on the relation between brand attitude and purchasing intention, there were two surveys: One where relation between brand attitude and purchase intention was studied without Front of package labelling, the other where impact on relation between brand attitude and purchase intention due to FOP labelling was analysed. Impact of gender was also studied. It was found that the presence of presence of FOP labelling does not significantly alter the relation between purchase intention and brand attitude. However, gender does affect the relation based on the surveys conducted.

Pabst, E., Corsi, A. M., Vecchio, R., Annunziata, A., and Loose, S. M. (2020) was a cross-country discrete empirical study. About 700 respondents each in Italy, Germany and Australia participated in a discrete choice experiment with graphically simulated wine back labels. They were allotted to two different random reference groups. One group received positive information through labels and the other group received negative information about the wine ingredients. Behaviour of the respondents was then analysed. All three countries show positive response with respect to nutritional labelling.

A survey was conducted in consumer electronics in UK trying to find out customer behaviour regarding circular labels signifying recyclability and sustainability, thereby showing the impact of labels on sales of products. Conjoint analysis showed that customers usually prefer a product labelled as circular/sustainable when compared to products with otherwise identical attributes. This also increases the willingness to pay more for products with favourable circular labels.

In Gillon-Keren, M., Kaufman-Shriqui, V., Goldsmith, R., Safra, C., Shai, I., Fayman, G., and Gordon, E. (2020) secondary research of previous studies and extensive literature review to determine the criterion for a positive front of the package labelling, was done. Study revealed that people often ignored the actual nutritional content due to the presence of a positive front of the package label: thus, rules and regulations for food policy have to keep that in mind.

Both primary and secondary research were used for data collection. Primary data was collected from 100 random sample households in Erode, Tamil Nadu. Structural equation modelling was used to study the effect of COVID-19 on shopping behaviour of middle-class consumers. Results showed that shifting buying grocery from online modes, avoiding non-essential items, buying locally sourced product were some of the frequent behaviours shown by middle class consumers during the pandemic. Lack of credit for buying was found to be an insignificant factor.

As a part of Finkelstein, E. A., Doble, B., Ang, F. J. L., Wong, W. H. M., and van Dam, R. M. (2020) paper, randomised control trials were conducted in 117 shops where people had to choose between products with no FOP, products with healthy choice symbol on FOP and products with healthy choice symbol and physical activity equivalent information too. Positive labels, like the healthier choice symbol, are likely to increase purchases of labelled products. But such changes might not lead to extra sales or healthier dietary choices. Clubbing positive labels with extra physical equivalent activity might not solve the issue too.

In Shamim, K., Khan, S. A., & Ahmad, S., Consumers' understanding of nutrition labels for ultra-processed food products, a validated questionnaire was distributed through mall intercept method where every 10th person exiting the mall was surveyed to ensure a random sample.

The questionnaire asked people about their socioeconomic backgrounds, their preference for products with or without food labels. It also asked about what labels consumers look for while buying ultra-processed foods. Findings revealed that most customers frequently read the food labels while buying processed food, female population read them more frequently. Lack of time, interest, small print was found to be the common reasons for not wanting to read the labels.

Under Dangi, N., Gupta, S. K., and Narula, S. A. (2020), consumer buying behaviour and purchase intention of organic food involved an experimental approach clubbed tasting of beer samples with questionnaires about beer-related attitudes and behaviours. A multi-response measurement approach was followed, where acceptability, sensory characterization, holistic/conceptual perceptions, and cognitive/emotional/situational responses were obtained for beers with flavours of different intensities. The results confirm findings of previous literature on beer and product labelling, signifying those sensory properties are less prone to external information effects than are affective, emotional and other, non-sensory product judgments. Beer drinkers of both traditional and craft flavours had favourable reaction towards apt product labels. The research Ma, G., and Zhuang, X. (2020) studies nutrition label processing in the past 10 years. Contributions from eye tracking approach involved secondary analysis in the form of extensive review of 91 studies from 2019-2020 and classifying the most important factors displayed while buying organic food with special reference to eco labels and their importance in the buyer decision making process. Individual factors like health concern, environment concern, knowledge and awareness, eco-labels and price followed by trust in organic food are the most crucial in organic food purchase. The findings suggest that eco-labels increase trust in organic food by reducing information asymmetry in consumers. It is a deductive research aimed at studying previous eye tracking studies. It seeks to understand how food labels affect consumer behaviour. After an extensive research of over 45 eye tracking studies, improved designs of nutrition labels increase attention capture and nutrition label readability, but it does not significantly result in healthier dietary choices.

In Lim, J. H., Rishika, R., Janakiraman, R., and Kannan, P. K. (2020), secondary data about packaging and nutritional content of 21,096 products, 9,083 brands, and 4,408 firms across 44 food and beverage categories in the US over a

16-year time frame was collected. A model was developed to study the effect of Front of package labels on overall nutritional quality of products and consumer perception about them. A FOP effect was observed - brands with nutritional front off package labels were likely to offer increasingly healthy products with time compared to non-FOP adopter brands.

Under Correa, T., Fierro, C., Reyes, M., Carpentier, F. R. D., Taillie, L. S., and Corvalan, C. (2019), impact of Chilean government regulation to combat obesity was studied. Chilean government had passed a regulation mandating use of front labels talking about nutrition. Nine focus groups of mothers of children (2-14 years old) were conducted in Santiago-Chile. Stratified sampling was followed according to social and economic backgrounds. A series of inductive interviews took place to gather insights. This aggressive campaigning influenced the mothers from diverse socioeconomic backgrounds into buying products with healthier labels.

In Ikonen, I., Sotgiu, F., Aydinli, A., and Verlegh, P. W. (2020), consumer effects of front-of-package nutrition labelling was studied. An interdisciplinary meta-analysis, a thorough review of literature and primary data from a survey of 200 users of Amazon Turk interface was performed. They were asked to evaluate and rank products on a random basis. The Front of Package labels help consumers in identification of healthier product variants. They also nudge consumers toward healthier choices but only to a limited extent. Labels also cause halo effects, positively influencing not only virtue but also vice products, e.g., interpretive nutrient-specific labels improve health perceptions of both vice and virtue products. Memon, S., Pawase, V. R., Pavase, T. R., and Soomro, M. A. (2021) investigated impact of COVID-19 on the Food and Beverages Industry. China and India Perspective studied the effect of the pandemic on the F&B industry. In this age of pandemic, it is obvious that buying habits have changed. Whether they are affected by labels and if that change is significant or not is a task worth pursuing. And that is what this research aims to do, through primary research with a diverse set of stakeholders.

Research Methodology

Till now, not many studies cover the impact of healthy labels on consumer perception especially during the

pandemic. The study is exploratory in nature. This study aims to study that. The plan is to interview customers and grocers about their buying decision process. Specifically, regular shoppers will be asked about the likelihood of them buying a product with nutrition labels attached to it.

Additionally, there would be investigation in the matter if people react differently to labels like '100% safe', '99% germs dead' etc. And does nutritional content at the front of package motivate customers to buy the product. Previous studies have been done about beer, healthy foods, processed foods have been done. However, gap lies in how the FOP labels affected consumer behaviour during purchase of juices during the pandemic.

Opinions of grocers in general trade would be taken too w.r.t the sales of such labelled products.

1. Age

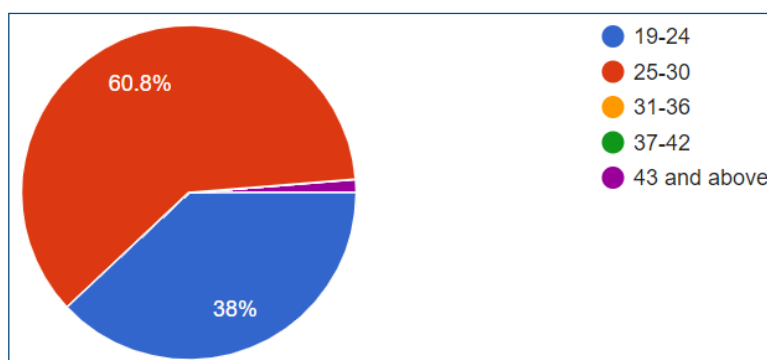


Fig. 1: Age

As we can see there were 90 people in the age group 19-24. Three people belonged to the age group of 43 and

Qualitative questions in the form of surveys will be sent to frequent customers. There also shall be interviews in ten grocery shops in Delhi NCR middle income suburb. Shoppers and shopkeepers will be interviewed about specific product preferences.

- Conduct primary research of shoppers and grocers through online surveys and personal interviews. Secondary research to be conducted on reports, press releases, articles regarding recent changes in product labels of juices.
- Collect various insights and conduct statistical analysis to see if there was a significant impact of labels on buyer decision making process.

Data Analysis and Interpretation

Demographics of the Respondents

above. And there are 144 people who are in the age group of 25 to 30 years old.

2. Gender

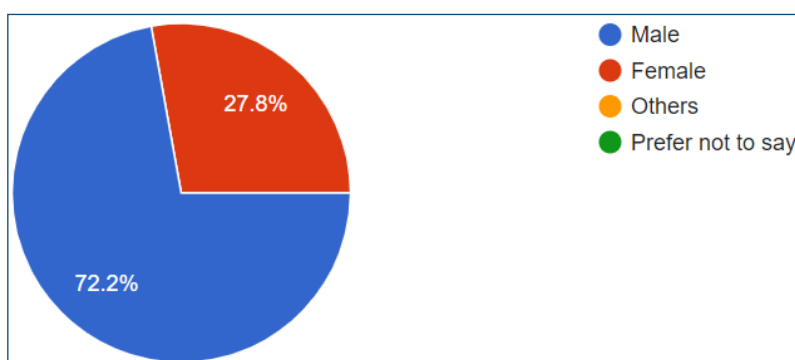


Fig. 2: Gender

As we can see, roughly three fourth of people surveyed were male. This disparity has to be kept in mind while drawing conclusions.

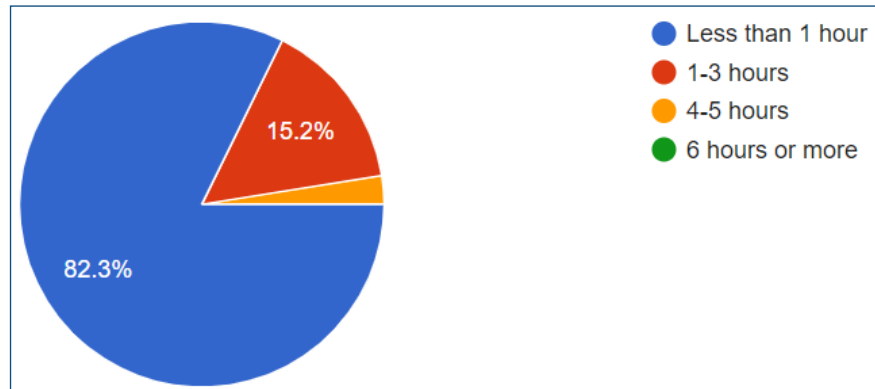


Fig. 3: Time Spent on Buying Drinks

3. How much time do you spend on buying drinks per week? (non alcoholic)

Total number of respondents : 237

As expected, a large percentage of people do not spend a lot of time in buying non alcoholic drinks. A small

percentage of people reported that they spent 1-3 or even 4 hours while buying drinks. That indicates the possibility that these are shoppers who buy in bulk on a regular basis. It is likely that they plan their grocery trips accordingly.

To check the reliability of the questionnaire, we perform the Cronbach Alpha test on SPSS.

Table 1: Cronbach Alpha Test

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
I am worried about the pandemic.	48.7342	41.891	.454	.575	.805
I am afraid of getting infected while shopping.	49.0253	41.237	.405	.578	.808
I fear that I am going to get the virus eventually.	49.4051	41.250	.369	.290	.811
I am looking to buy healthier drinks now.	48.9494	40.269	.558	.549	.798
I judge what is healthy based on the packaging of the product.	49.7215	41.159	.392	.490	.809
Juices are a healthier option compared to aerated drinks.	48.9114	40.988	.461	.467	.804
I would prefer to buy drinks whose front label shows it to be 'natural' and 'healthy'.	49.0506	41.972	.512	.355	.803
I am more inclined to buy a drink if it shows the primary ingredients on its front packaging.	49.0127	41.326	.531	.447	.801
I judge what is healthy based on the front label of the product.	49.5316	40.038	.493	.473	.802

<i>Item-Total Statistics</i>					
	<i>Scale Mean if Item Deleted</i>	<i>Scale Variance if Item Deleted</i>	<i>Corrected Item-Total Correlation</i>	<i>Squared Multiple Correlation</i>	<i>Cronbach's Alpha if Item Deleted</i>
I have begun to shop online due to COVID-19.	49.0886	41.903	.356	.393	.812
I consider buying drinks to be essential during this time.	49.6582	38.362	.571	.465	.795
I indulged in panic buying when lockdowns were announced.	49.8354	40.867	.272	.264	.825
I am looking to buy healthy products to boost my immunity	49.0000	40.754	.529	.514	.800

Table 2: Reliability Test

<i>Reliability Statistics</i>		
<i>-Cronbach's Alpha</i>	<i>Cronbach's Alpha Based on Standardized Items</i>	<i>N of Items</i>
.817	.829	14

The values are greater than 0.7, hence the questions display consistency and thus are reliable.

Table 3: KMO and Bartlett's Test

"KMO and Bartlett's Test"		
"Kaiser-Meyer-Olkin Measure of Sampling Adequacy."		.761
"Bartlett's Test of Sphericity"	"Approx. Chi-Square"	1152.710
	df	91
	Sig.	.000

The KMO value is 0.7, which suggests that the sample is sufficient.

Table 4: Correlations

<i>Correlations</i>					
		<i>C</i>	<i>H</i>	<i>F</i>	<i>B</i>
C	Pearson Correlation	1	.277**	.332**	.420**
	Sig. (2-tailed)		.000	.000	.000
	N	237	237	237	237
H	Pearson Correlation	.277**	1	.611**	.462**
	Sig. (2-tailed)	.000		.000	.000
	N	237	237	237	237
F	Pearson Correlation	.332**	.611**	1	.582**
	Sig. (2-tailed)	.000	.000		.000
	N	237	237	237	237
B	Pearson Correlation	.420**	.462**	.582**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	237	237	237	237

**. Correlation is significant at the 0.01 level (2-tailed).

We observe high correlation among only two variables Health reasons and Front of Pack labels which can be explained by the questionnaire as importance attributed to Front of Package labels is often due to health reasons, especially in this pandemic.

Important quotations from the grocers/retailer interviews (translated into English)

- *"...Kids loved fruity small pack but corona has stopped them from coming here. Their Mummy-Papa(parents) come and buy big bottles of juice once in 7-8 days..."*
- *"...Dabur salesman gave me good deals; these new juice companies are bringing expensive transparent bottles. Amul and Frooti are still selling in tetra. But young people like you buying new flavours..."*
- *"... labels do not affect much. Should be attractive..."*
- *"... Healthy juice demand seen, bhaiya-Bhabhi paying me advance for daily delivery of juice bottles..."*
- *"... I don't get time to see, whatever I bring, people take away in bulk. Summers are near. Juice and nariyal paani (coconut water) bottles need to be kept in shop..."*
- *"...Aam panna powder and jaljeera is also sold. We keep Real juice, lot of demand for mixed fruit and mango..."*
- *"...my store was crowded; customer took whatever was there. Bulk buying. Patanjali sale increased and I remember BeNatural gave discounts on their fresh juice bottles..."*
- *"... More customers want my phone and Whatsapp, they are ordering from home. I have started online delivery..."*

In total 7 unstructured interviews were conducted with grocers to assess their opinion on the juices they are selling. The responses show diversity in opinion but highlight us to a fact that consumption patterns have indeed changed in the juice segment.

Discussion and Future Area of Research

Previous studies talked about purchasing intention, moderating impact of labels and how they affect perception. However, in the context of the pandemic, this study has identified health reasons as a strong reason to trust labels denoting health. While the retailer interviews offered varying protectives. Common themes which

emerged were how at home consumption has increased and how at least the well to do are prioritising health and immunity. Due to supply shocks or by design, the lockdowns saw increased consumption of larger SKUs with a different demographic. Whereas the survey told us that health, immunity, fear of COVID were primary motivators for people altering their behaviour in the pandemic. From the survey, we become aware that worrying about the pandemic receives maximum agreement, closely followed by the belief that juices are healthier options compared to aerated drinks. Ayurvedic and Indianised products which were widely advertised during the pandemic aren't the first choice based on the survey.

The labels on the juice bottles can be helpful in the future in making people aware so that they can make an informed decision. Aside from this the labels possess the information needed which will overall increase the public's knowledge about the food and beverages industry in turn increasing the overall literacy rate comes to the food and beverages industry. These labels will also be helpful for the common public as a sign that the juice within the bottle is completely safe and healthy to drink.

Conclusion

Theoretical Implications

While lots of research has been done on impact of labels in persuading consumers, this research does it in the context of three variables: Health, Pandemic and Labels in Indian juice consumption context. It can be further studied to understand changing consumer preference and changes in purchasing patterns. That can help organisations plan their promotion efforts in a more targeted manner. For marketing academia, it opens the door of more empirical research into the subject of pandemic oriented marketing.

Managerial Implications

Both the survey and the retailers point to the fact of 1. Panic buying in Bulk 2. Buying Larger SKUs as opposed to buying nothing 3. Prioritisation of health and immunity 4. In case of negative news, Health oriented labels helped consumers decide.

Managers can use these insights to plan their marketing messages. Another key issue which emerged was that buyers do not consider juices to be essential, hence labels

have to target that issue, repositioning them as healthy drinks in lieu of tasty.

Limitations

Due to the pandemic, interviews of grocers were restricted to North India, majorly from Delhi-NCR region. The results are thus, a representative of that demographic. Also, since the nature of the questions was qualitative, there might have been a miscommunication from any end. Another limitation of this study is that of survey responses which majorly covers people belonging to metropolitan cities and even tier-1 towns. Future research study may add a new dimension to it. There might also be the issue of regionality for retailer interviews.

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