Analysis of Health Drinks : What is Satisfying Consumer's Thirst?

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Abstract

The ever - raising dynamics in the Indian market place and the extensive competition has emphasized on the significance in identification of factors behind the consumers' consumption of health drinks to quench the thirst of the marketers with solutions. This study identified 32 different underlying reasons as factors for a consumer to prefer health drinks. The study analyzed survey responses of 432 respondents from South Bengaluru. Furthermore, the study examined the significance of each factor with its impact on purchase intentions of health drinks using exploratory factor analysis. The interpretation was then carried out to analyze how each factor - Advertisement, Support-Drink, Influence, Lifestyle, Relaxation, Activeness, Arousal, Health-Consciousness, Taste, Price, and Packaging impacted the purchase intentions. The results of the regression analysis further revealed that Activeness, Relaxation, Packaging, Arousal, Advertisement, Health - Consciousness, and Taste had a significant impact on consumer purchase intentions about health drinks. The study revealed that 'Activeness' was the utmost preferred attribute for the preference of health drinks by the consumers.

Keywords: health drinks, purchase intention, factor analysis, regression

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Tith an idea of a salubrious beverage, water instantly comes to mind, but many more value adding nutritious drinks are available for the best diet. Some drinks include magnificent health gains, from relieving minor ills like indigestion to major ailments like osteoporosis, etc. Maximizing marketing efforts necessitate conscious consideration of consumer's dynamic consumption patterns. With options galore, inclining towards adventurous tastes, innovative ingredient combinations, marketers are thirsty to understand consumer's purchase attitudes to place their bets. This emerging growth in the segment of health drinks has posed challenges to pinpoint which drinks gain more consumer acceptance and the reasons for their choices.

Health is man's most precious possession. It regulates all his/her actions and also moulds his/her fortune. The saying "health is wealth" indicates the significance of health in today's world. Health is a fundamental key to knowledge, success, education, good citizenship, and leads to a happy life. It is not possible for an individual to perform efficiently without good health. In comparison with other food supplementations, at the top of the list stand health drinks when equated with others. As health consciousness is rising in India, this has subsequently led to the enormous growth of food and fitness markets, with numerous products being developed and pushed into masses across the country to meet the growing demand for nutritious food and beverages. To capitalize this trend, marketers are also changing strategies pitching in innovation with the support of research and development, introducing new product launches like herbal based, ayurvedic based, etc., which are more health conscious and shift the themes of the marketing campaigns. Health and wellness segments are growing due to alarming alerts

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from increase in non-communicable diseases. Consumers are searching for products or services which ensure them to lead a productive, fuller, and happier life. Drinks made specifically for providing nutritious diet, energy, and health to consumers as health product alternatives or support drinks are gaining top priority in consumer purchase patterns (Sloan, 2003).

In the evolving beverage market, the growth seems to be higher towards low calorie, light, and healthy drinks. The desire for health and concern for ill-health are driving consumers towards these drinks (Bedi & Paul, 2013). According to Majumdar (2007), malted beverages are popularly known as health drinks in India. Historically, malted beverages have a strong association with milk. Such drinks used to be consumed in the Southern and Eastern regions of the country which had a perennial shortage of milk supply. So, malted beverages positioned themselves as substitutes for milk (Srivastava & Ghufran, 2013).

According to Ayurveda, the drinks which have medicinal properties along with the property of quenching thirst are called as health drinks (Mukherjee, Venkatesh, & Gantait, 2010). Green-tea can be defined as a form of tea, which is made of leaves prevented from oxidizing, shaped, and let dried (Gebely, 2012). The important and well performed quality attributes of green tea have been revealed as safety, health, and sensory factors (Lee, Bonn, & Cho, 2018). The percentage of consumers who prefer green tea has increased enormously as consumers are more likely to associate it with health benefits when compared with white or black or oolong teas (Craford, 2015).

Physical activity and dietary reforms are the keystones of management of lifestyle diseases (Pappachan, 2011; Rukmini, 2013). A busy professional life leaves little time for exercise. A drink which is low in calorific value, such as a health drink, can serve as a healthy alternative to juices and colas. A study explained that obesity in children is majorly due to the fatty snacks and fast food they consume, which are high in calories and low in nutritional value (Hofferth & Curtin, 2003). According to a Euromonitor International report (2018), Indian consumers are spending more and more on nutritional supplements to combat the effects of health problems.

Literature Review

According to a research, 40% of consumers were willing to pay a premium for products like flavored milk, which contain added nutritional benefits (Armitstead, 1998; Hough & Sánchez, 1998; Yanese, Durán, & Costell, 2002). According to the Kaka and Kshirsagar (2016), India is one of the largest economies in the world in terms of purchasing power. With total household consumption expected to increase four-folds between 2005 to 2025, India is poised to emerge as the world's largest consumer market by 2030, with an aggregate spending of USD 13 trillion ("Indian consumer market likely to be world's largest by 2030," 2013).

The new supplements for breakfast are fresh fruit and vegetable juices for many households across the country due to the busy day schedules and growing working women population. Consumers with growing consciousness of health habits are switching from carbonated juices to vegetable and fruit juices. Un-packed juices, popularly noticed as preservative-free beverages in the markets, are also gaining popularity (PwC, 2017).

Prakash (2011) studied the factors influencing consumer buying behavior in the purchase of malt drinks including price, quality, flavor, taste, advertisement, and energy. He concluded that quality of the product with the right price can be the best-loved combination and becomes a part of the lifestyle of the consumer.

Changing lifestyles, rise in purchasing power, growth of nuclear families, and the impact of Western culture drive the Indian food and beverage markets. Mothers tend to attach maximum importance to a diet rich in nutrition for the growth of their kids, which is an important factor for the ever-growing nutrition food and drinks market in the country.

The two main variables of consumer attitude towards health drinks were classified as extrinsic - which included price, country of manufacturing, packaging, shelf presence, and brand name; whereas, the intrinsic factors included nourishment, taste, colour, and size (Wells, 2000). Consumer purchase patterns have made yesterday's luxuries as today's necessities. In a dynamic and competitive market place, consumers are professionally and

personally stressed and work hard to overcome and survive in lives. This demands extensive energy and stamina along with high nutritious health drinks (Ali & Ahmad, 2010).

Tamilselvi and Kirubaharan (2011) identified the factors influencing the buying decisions of health food drinks, and found that income, size of the family, and education had no significant differences in health drink purchase patterns. Motwani and Agarwal (2012) observed a positive correlation between buying patterns of consumers and factors influencing the consumers. They also identified that the key success of development in market shares was possible only though healthy food and beverages.

The health consciousness trend fuelled a surge in fresh juices by raising their sales volumes. Organic fresh juice is the new term targeting the premier class consumers with home delivery service options available, thus benefiting consumers with fresh juices at their homes (Strailey, 2014). Natural and organic beverages continue to see sales growth, while they accounted for only 6.6% of the total beverage category, while health beverages drove 31% of the dollar growth. Increased interest in green juices has been observed as people look to add more fruits and vegetables to their diet (Acosta, 2016).

In studies of purchase intentions of health drinks, buyers would go a long way in helping the companies to identify the optimum mix of ingredients which a customer expects in the product. This can also be of much help for successful product development and enactment of effective advertising campaigns (Johnson, 2002). Moreover, Indian consumers differ from consumers in other countries in terms of perception and importance attached to product attributes. Thus, it is meaningful to investigate and analyze customers' preference for health drinks (Duffey & Popkin, 2006).

A research study conducted on global food and drink trends 2017 by Mintel group as a research project discovered that there was a 257% increase in vegan beverages and food 'new products launches' in 2016 when compared to 2011, as the awareness and health-consciousness grew in the minds of consumers.

Kumar (2010) mentioned that packaging of health drinks influenced the purchase decisions of consumers. Another study concluded that the sales of fruit juices were highly influenced by the packaging (Ježovičová, Turčínková, & Drexler, 2016). Packaging played a significant role in communication and promotion of the brands (Silayoi & Speece, 2007). In the food and beverage industry, consumers' attitude towards brands were majorly influenced by the packaging of the products (Hawkes, 2010). Silayoi and Speece (2004) called packaging as 'salesman on the self,' highlighting the importance of packaging.

Gender, marital status, education, occupation, income, etc. was not influenced by the satisfaction of the customers (Sekar & Thangavel, 2016). Ali and Mohamed (2015) uncovered that there were essentially three factors that influenced the choice of drinks like - taste, market or advertisements, and health. It is important for a marketer to focus on the target market, and advertisements should be intertwined around the target audience (Haque, Ahmed, & Jahan, 2009). It is essential for the manufacturers to supply tastier health beverages with different flavors at benchmarking prices, but they should not compromise on the standards and quality norms of the health drinks.

In a research conducted by Thangaraj, Prakash, and Nandhini (2014), it was concluded that consumer decision of the consumption of health drinks was self-initiated and was not majorly influenced by friends, peers, and family members. Buxton and Hagan (2012) revealed that 54% of the consumers consumed health drinks after physical work outs to restore their energy. Another study also concluded that health drinks reduced tiredness and increased one's stamina (Badaam & Masroor, 2013).

Another study strongly suggested that a consumer chooses brands, which are highly based on brand loyalty. Atwal and Williams (2008) observed that experiential marketing viewed consumers as emotional beings in which brands were engrossed with consumers through deep, meaningful, and tangible experiences. Those who market experientially will achieve an assertable competitive advantage. Ali and Mohamed (2015) observed that the other factors considered by the consumers while purchasing health drinks were: availability, quality, colour, and taste. The study concluded Horlicks as the most accepted malt beverage due to its outstanding brand loyalty along with colour, price, taste, and the shelf life of the product in the stores.

Methodology

The present study is an empirical study based on primary data collected from 432 respondents of South Bengaluru in the state of Karnataka through a structured questionnaire. The research was conducted during September - December 2017. The respondents were asked to provide the data on a 5 - point Likert scale; wherein they were supposed to mark the level of *strong agreement* to the level of *strong disagreement* with statements regarding the 32 attributes towards purchase intentions of health drinks.

The respondents were selected based on the convenience sampling technique. The collected data were critically examined with the help of statistical tools such as percentage analysis, regression analysis, and factor analysis approach. The Table 1 presents the details regarding the demographic profile of the respondents.

Table 1. Demographic Profile of the Respondents

| Variables | Frequency | Percentage (%) | | | | | | | | | |
|-------------------|------------------------|----------------|--|--|--|--|--|--|--|--|--|
| GENDER | | | | | | | | | | | |
| Male | 198 | 46 | | | | | | | | | |
| Female | 234 | 54 | | | | | | | | | |
| Total | 432 | 100 | | | | | | | | | |
| AGE GROUP | | | | | | | | | | | |
| < 25 Years | 98 | 23 | | | | | | | | | |
| 26 - 40 years | 124 | 29 | | | | | | | | | |
| 41 - 60 years | 136 | 31 | | | | | | | | | |
| Over 60 Years | 74 | 17 | | | | | | | | | |
| Total | 432 | 100 | | | | | | | | | |
| II | NCOME LEVEL (PER MONT | н) | | | | | | | | | |
| Below ₹ 20000 | 134 | 31 | | | | | | | | | |
| ₹ 20000 - ₹ 30000 | 123 | 28 | | | | | | | | | |
| Above ₹ 30000 | 175 | 41 | | | | | | | | | |
| Total | 432 | 100 | | | | | | | | | |
| | OCCUPATION | | | | | | | | | | |
| Profession | 111 | 26 | | | | | | | | | |
| Service | 139 | 32 | | | | | | | | | |
| Business | 124 | 29 | | | | | | | | | |
| Others | 58 | 13 | | | | | | | | | |
| Total | 432 | 100 | | | | | | | | | |
| CONSUM | PTION OF HEALTH DRINKS | PER WEEK | | | | | | | | | |
| Vegetable Juice | 86 | 20 | | | | | | | | | |
| Milk-Based Drinks | 134 | 31 | | | | | | | | | |
| Green Tea | 91 | 21 | | | | | | | | | |
| Fruit Juice | 121 | 28 | | | | | | | | | |
| Total | 432 | 100 | | | | | | | | | |

Data Analysis and Results

The KMO measures the sampling adequacy (which determines if the responses given with the sample are adequate or not) which should be close than 0.5 for a satisfactory factor analysis to proceed. Kaiser (1974) recommended 0.5

Table 2. KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of | .708 | | | | | |
|-------------------------------|---|------|--|--|--|--|
| Bartlett's Test of Sphericity | artlett's Test of Sphericity Approx. Chi-Square | | | | | |
| | Df | 496 | | | | |
| | Sig. | .000 | | | | |

Table 3. Communalities

| Variables | Extraction |
|--|------------|
| Energy drinks mean youth and strength. | .893 |
| Athletes and celebrities drink them, so do I. | .904 |
| Commercials say: "Energy drinks boost energy." So, I drink them. | .562 |
| Prefer in pubs and clubs. | .616 |
| I prefer health drinks to mix with any other drink while drinking. | .898 |
| Prefer it as a hangover cure. | .931 |
| Will sometimes take health drinks as alternative food. | .565 |
| My friends influenced me. | .854 |
| My family influenced me. | .569 |
| Drink because doctors suggest. | .923 |
| Always prefer along with meals. | .898 |
| Prefer at home. | .878 |
| Prefer during work/college. | .874 |
| To improve my mood. | .916 |
| I drink them without specific reason. | .856 |
| I prefer these while chilling out with friends. | .518 |
| To stay awake. | .892 |
| Will help me to drive more distance for long time. | .852 |
| Will help me to work for longer hours. | .907 |
| To get more energy. | .870 |
| Boost performance during exercise. | .910 |
| Improves concentration and memory. | .537 |
| To hydrate my body. | .882 |
| They have a lot of nutritional value. | .927 |
| I consume health drinks because these yield positive health results. | .608 |
| For weight loss purposes. | .500 |
| Their taste is so delicious. | .872 |
| They have more flavours. | .883 |
| Packaged drinks are more accessible than freshly made juices. | .609 |
| I prefer packaged drinks over freshly made juices. | .856 |
| I consider and compare prices before opting for health drinks. | .888 |
| The prices of health drinks are low. | .519 |

Table 4. Rotated Component Matrix^a

| Factors | C | Components | | | |
|--|------|------------|------|------|--|
| | 1 | 2 | 3 | 4 | |
| Energy drinks mean youth and strength. | .190 | .147 | .135 | .864 | |
| Athletes and celebrities drink them, so do I. | .117 | .915 | .131 | .024 | |
| Commercials say: "Energy drinks boost energy." So, I drink them. | .132 | .133 | .984 | 156 | |
| Prefer in pubs and clubs. | .149 | .088 | .700 | .053 | |
| I prefer health drinks to mix with any other drink while drinking. | .098 | .918 | .045 | .087 | |
| Prefer it as a hangover cure. | .133 | .927 | .081 | .091 | |
| Will sometimes take health drinks as alternative food. | .785 | .009 | .005 | .086 | |
| My friends influenced me. | .153 | .073 | .872 | .088 | |
| My family influenced me. | .207 | .846 | .443 | .259 | |
| Drink because doctors suggest. | .136 | .910 | .072 | .124 | |
| Always prefer along with meals. | .108 | .196 | .898 | .080 | |
| Prefer at home. | .060 | .927 | 021 | .088 | |
| Prefer during work/college. | .164 | .100 | .896 | .094 | |
| To improve my mood. | .872 | .134 | .169 | .122 | |
| I drink them without specific reason. | .174 | .056 | .862 | .124 | |
| I prefer these while chilling out with friends. | .390 | .720 | 042 | .090 | |
| To stay awake. | .860 | .129 | .161 | .124 | |
| Will help me to drive more distance for long time. | .280 | .141 | .789 | .163 | |
| Will help me to work for longer hours. | .176 | .126 | .142 | .873 | |
| To get more energy. | .841 | .140 | .158 | .151 | |
| Boost performance during exercise. | .107 | .033 | .928 | .067 | |
| Improves concentration and memory. | .424 | .776 | .192 | .055 | |
| To hydrate my body. | .040 | .021 | .163 | .899 | |
| They have a lot of nutritional value. | .118 | .197 | .040 | .919 | |
| I consume health drinks because these yield positive health results. | .995 | .109 | 088 | .526 | |
| For weight loss purposes. | .133 | .850 | .284 | .092 | |
| Their taste is so delicious. | .278 | .075 | .036 | .808 | |
| They have more flavours. | .124 | 011 | .052 | .898 | |
| Packaged drinks are more accessible than freshly made juices. | .112 | .168 | 102 | .746 | |
| I prefer packaged drinks over freshly made juices. | .219 | .059 | .126 | .866 | |
| I consider and compare prices before opting for health drinks. | .044 | .086 | .175 | .895 | |
| The prices of health drinks are low. | .004 | .730 | .360 | .044 | |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

(value for KMO) as the minimum (barely accepted) value, values between 0.7 - 0.8 are acceptable, and values above 0.9 are superb. Looking at the Table 2, the KMO measure is 0.718, which is in between 0.7 - 0.8, and therefore, can be accepted (Table 2). The Bartlett's test of sphericity depicts chi-square value of 11251.488, which is significant at the 1% level of significance. It is another indication of the strength of the relationship among the

^{a.} Rotation converged in 9 iterations.

variables. From the same table, we can see that the Bartlett's test of sphericity is significant (0.00), which is less than the significance level of 0.050. The Table 2 highlights the results of KMO and Barlett's test of sphericity.

The next item from the output is a table of communalities which shows how much of the variance (i.e. the communality value which should be more than 0.5 to be considered for further analysis. Else, these variables are to be removed from further steps of factor analysis) in the variables has been accounted for by the extracted factors. For instance, over 90% of the variance in "nutritional value" is accounted for, while 50% of the variance in "weight loss purposes" is accounted for. The variance for all the factors is above 0.5. So, all the variables can be taken for further analysis (Table 3).

Table 5. Consolidated Factor Output

| Factor No. | Variables | Factor Name |
|------------|--|---------------|
| F1 | Energy drinks mean youth and strength. | Advertisement |
| | Athletes and celebrities drink them, so do I. | |
| | Commercials say: "Energy drinks boost my energy." So, I drink them. | |
| 2 | Prefer in pubs and clubs. | Support Drink |
| | I prefer health drinks to mix with any other drink while drinking. | |
| | Prefer it as a hangover cure. | |
| | Will sometimes take health drinks as alternative food. | |
| 3 | My friends influenced me. | Influence |
| | My family influenced me. | |
| | Drink because doctors suggest. | |
| 4 | Always prefer along with meals. | Lifestyle |
| | Prefer at home. | |
| | Prefer during work/college. | |
| 5 | To improve my mood. | Relaxation |
| | I drink them without specific reason. | |
| | I prefer while chilling out with friends. | |
| 6 | To stay awake. | Activeness |
| | Will help me to drive more distance for long time. | |
| | Will help me to work for longer hours. | |
| 7 | To get more energy. | Arousal |
| | Boost performance during exercise. | |
| | Improves concentration and memory. | |
| 8 | To hydrate my body. | Consciousness |
| | They have a lot of nutritional value. | |
| | I consume health drinks because these yield positive health results. | |
| | For weight loss purposes. | |
| :9 | Their taste is so delicious. | Taste |
| | They have more flavours. | |
| 10 | Packaged drinks are more accessible than freshly made juices. | Packaging |
| | I prefer packaged drinks over freshly made juices. | |
| 11 | I consider and compare prices before opting for health drinks. | Price |
| | The prices of health drinks are low. | |

The Table 4 reveals the factors that have been identified with different values. The Table 5 not only shows the factor names, but also reveals the combination of factors grouped under each single factor.

The variables such as youth and strength, athletes and celebrities, energy drinks boost my energy are combined into one single factor called 'Advertisement' (Factor 1) and have factor loadings of 0.864, 0.915, and 0.984. Haque et al. (2009) also stated that it is important for a promoter to focus on a specific target market, and advertisements should be intertwined around the target audience. Factor 2 consists of four variables - prefer in pubs and clubs, mix

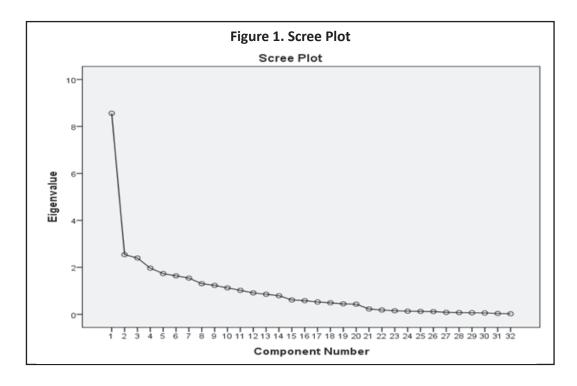
Table 6. Total Variance Explained

| Component | | Initial Eigen v | | | tion Sums of Squ | | Rotation Sums of Squared Loadings | | | |
|-----------|-------|-----------------|--------------|-------|------------------|--------------|-----------------------------------|--------|--------------|--|
| component | Total | | Cumulative % | Total | % of Variance | Cumulative % | Total | | Cumulative % | |
| 1 | 8.559 | 26.747 | 26.747 | 8.559 | 26.747 | 26.747 | 3.475 | 10.859 | 10.859 | |
| 2 | 2.541 | 7.941 | 34.688 | 2.541 | 7.941 | 34.688 | 2.903 | 9.071 | 19.930 | |
| 3 | 2.398 | 7.494 | 42.182 | 2.398 | 7.494 | 42.182 | 2.483 | 7.761 | 27.691 | |
| 4 | 1.967 | 6.147 | 48.329 | 1.967 | 6.147 | 48.329 | 2.192 | 6.851 | 34.541 | |
| 5 | 1.734 | 5.419 | 53.747 | 1.734 | 5.419 | 53.747 | 2.152 | 6.724 | 41.265 | |
| 6 | 1.639 | 5.122 | 58.870 | 1.639 | 5.122 | 58.870 | 2.095 | 6.547 | 47.811 | |
| 7 | 1.543 | 4.823 | 63.692 | 1.543 | 4.823 | 63.692 | 2.093 | 6.541 | 54.353 | |
| 8 | 1.304 | 4.074 | 67.766 | 1.304 | 4.074 | 67.766 | 2.023 | 6.321 | 60.674 | |
| 9 | 1.233 | 3.853 | 71.619 | 1.233 | 3.853 | 71.619 | 1.980 | 6.188 | 66.862 | |
| 10 | 1.125 | 3.516 | 75.136 | 1.125 | 3.516 | 75.136 | 1.840 | 5.751 | 72.613 | |
| 11 | 1.022 | 3.194 | 78.329 | 1.022 | 3.194 | 78.329 | 1.829 | 5.716 | 78.329 | |
| 12 | .912 | 2.851 | 81.180 | | | | | | | |
| 13 | .854 | 2.670 | 83.850 | | | | | | | |
| 14 | .793 | 2.479 | 86.329 | | | | | | | |
| 15 | .612 | 1.912 | 88.241 | | | | | | | |
| 16 | .583 | 1.823 | 90.064 | | | | | | | |
| 17 | .527 | 1.645 | 91.709 | | | | | | | |
| 18 | .491 | 1.534 | 93.243 | | | | | | | |
| 19 | .447 | 1.396 | 94.640 | | | | | | | |
| 20 | .432 | 1.349 | 95.989 | | | | | | | |
| 21 | .229 | .716 | 96.705 | | | | | | | |
| 22 | .184 | .576 | 97.282 | | | | | | | |
| 23 | .151 | .472 | 97.754 | | | | | | | |
| 24 | .133 | .417 | 98.170 | | | | | | | |
| 25 | .125 | .392 | 98.562 | | | | | | | |
| 26 | .119 | .372 | 98.934 | | | | | | | |
| 27 | .083 | .260 | 99.194 | | | | | | | |
| 28 | .074 | .230 | 99.425 | | | | | | | |
| 29 | .069 | .214 | 99.639 | | | | | | | |
| 30 | .058 | .181 | 99.820 | | | | | | | |
| 31 | .035 | .109 | 99.929 | | | | | | | |
| 32 | .023 | .071 | 100.000 | | | | | | | |

Extraction Method: Principal Component Analysis.

with any other drink, prefer it as a hangover cure, health drinks as alternative food with factor loadings of 0.700, 0.918, 0.927, and 0.785. This factor is named as 'Support Drink' (Factor 2). The variables such as my friends influenced me, my family influenced me, because doctors suggested are clubbed into a factor named 'Influence' (Factor 3) having factor loadings of 0.872, 0.846, and 0.910. The Factor 4 - 'Lifestyle' constitutes of three variables - prefer along with meals, prefer at home, prefer during work/college, having high loadings of 0.898, 0.927, and 0.896, respectively. The variables namely, to improve my mood, I drink without specific reason, I prefer while chilling out with friends have high loadings of 0.872, 0.862, and 0.720, which are combined into a single factor called 'Relaxation' (Factor 5). Factor 6 consists of the variables - to stay awake, drive more distance for long time, work for longer hours with high loadings of 0.860, 0.789, and 0.873, respectively and the clubbing of these three variables constitute the factor - 'Activeness'. The variables namely, to get more energy, boost performance during exercise, improves concentration and memory have high loadings of 0.841, 0.928, and 0.776, respectively and are combined and termed as 'Arousal' (Factor 7). Factor 8 constitutes of the variables - to hydrate my body, nutritional value, positive health results, and weight loss purposes with factor loadings of 0.899, 0.919, 0.995, and 0.850, respectively and the clubbing of these variables are named as the factor 'Consciousness'. The variables - their taste is so delicious and they have more flavors have factor loadings of 0.808 and 0.898 and are clubbed into a single factor called 'Taste' (Factor 9). Similar results were also obtained by Prakash (2011) regarding the factors influencing consumer buying behavior in the purchase of health drinks, which included flavor, taste, and energy. The variables - accessibility and packaged drinks are combined into one single factor named as 'Packaging' (Factor 10) with factor loadings of 0.746 and 0.866, which was also endorsed by Wells (2000) as extrinsic factors included price, country of manufacturing, packaging appeals to consumers to buy a particular health drink. The last two variables namely, compare prices before opting for health drinks and prices of health drinks are low are combined into one single factor called 'Price' (Factor 11) with high loadings of 0.895 and 0.730. It is observed that the 11 factors that are extracted together account for 78.32% of the variance, as shown in the Table 6.

The Eigen value actually reflects the number of extracted factors whose sum should be equal to the number of items, which are subjected to factor analysis. The next item shows all the factors extractable from the analysis along with their Eigen values.



The Eigen value table has been divided into three sub-sections, that is, initial Eigen values, extracted sums of squared loadings, and rotation of sums of squared loadings. For analysis and interpretation purposes, we are only concerned with extracted sums of squared loadings. The first factor accounts for 26.747% of the variance, the second: 34.688%, the third: 42.182%, the fourth: 48.329%, the fifth: 53.747%, the sixth: 58.870%, the seventh: 63.692%, the eighth: 67.766%, the ninth: 71.619%, the tenth: 75.136%, and the eleventh factor: 78.329%. The total variation accounted for by these 11 factors is 78.32%, which is found to be satisfactory, and hence, it benefits the validity of the study (Table 6).

The scree plot (Figure 1) is a graph of the Eigen values against all the factors. The graph is useful for determining how many factors are to be retained. The point of interest is where the curve starts to flatten. It can be seen that the curve begins to flatten between Factors 11 and 12. Note that Factor 11 onwards have an Eigen value of less than 1, so only 11 factors have been retained in the study.

Regression Analysis

Regression analysis was applied to assess the impact of these 11 factors of consumer buying behavior on health drinks. Here, stepwise regression is used to select the best grouping of predictor variables that account for the most variance in the outcome (R - squared). It is useful in an exploratory analysis or when testing for associations. It is used to generate incremental validity evidence in psychometrics. The primary goal of this is to build the best model; given the predictor variables, we want to test that account for the most variance in the outcome variable (R-squared). The results of the stepwise regression are shown in the Table 7. It is evident from the Table 7 that the Factor 1 'Activeness' followed by Factor 6 exert a significant impact on the consumer purchase intention (t - stat of 24.344 with p - value of 0.000). It commands a strong position in impacting the purchase intentions of consumers. The second important factor 'Relaxation' (Factor 5) which improves the mood of the consumer after drinking various heath drinks, having t - stat value of 12.16 and significance value of 0.000 also impacts the purchase

Table 7. Results of Stepwise Regression on Various Combinations of Independent Variables

| | Activeness | | Relaxation | | Packaging | | Arousal | | Adve | rtisemen | t Co | Consciousness | | |
|--------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------|----------------|----------------|----------------|----------------|
| Independent Variables | R ² | <i>t</i> -stat | R ² | t-stat | R ² | <i>t</i> -stat | R ² | <i>t</i> -stat |
| Activeness | .580 | 24.344 | .687 | 12.796 | .740 | 8.050 | .769 | 6.135 | .786 | 8.082 | .796 | 9.146 | .809 | 9.900 |
| | | .000 | | .000 | | .000 | | .000 | | .000 | | .000 | | .000 |
| Relaxation | | | | 12.16 | | 10.900 | | 7.788 | | 8.275 | | 9.195 | | 8.892 |
| | | | | .000 | | .000 | | .000 | | .000 | | .000 | | .000 |
| Packaging | | | | | | 9.522 | | 9.249 | | 8.669 | | 9.253 | | 9.950 |
| | | | | | | .000 | | .000 | | .000 | | .000 | | .000 |
| Arousal | | | | | | | | 7.066 | | 8.987 | | 8.556 | | 8.460 |
| | | | | | | | | .001 | | .000 | | .000 | | .000 |
| Advertisement | | | | | | | | | | 5.749 | | 5.214 | | 5.700 |
| | | | | | | | | | | .000 | | .000 | | .000 |
| Consciousness | | | | | | | | | | | | 4.726 | | 5.876 |
| | | | | | | | | | | | | .002 | | .000 |
| Taste | | | | | | | | | | | | | | 4.465 |
| | | | | | | | | | | | | | | .003 |

Note: All values are significant at the 1% level of significance.

intentions. Factor 11 - 'Packaging' and Factor 7 - 'Arousal' show t - stat values of 9.522 and 7.066, which states that health drinks improve concentration and energy as compared to other drinks, and packaged drinks are more accessible over freshly made juices. The significance level of the factor 'Advertisement' (Factor 1) is 0.000 and that of 'Health Consciousness' (Factor 8) is 0.002. Research provides evidence that consumers prefer health drinks because these have more nutritional value. The last factor 'Taste' (Factor 9) shows a t - stat value of 4.465 and significance level of 0.003. The results show that seven factors considered in the study collectively explain 80.9% of the variance in consumer purchase intention.

Discussion and Conclusion

In the evolving beverage industry, a significant role is played by health drinks in the Indian market. This study examined various factors that influenced consumers' purchase intention of health drinks. From this study, it is concluded that the most preferred health drinks in Bengaluru were milk-based drinks with 31% consumption rate, a finding which is supported by a study on milk based malted health drinks conducted by Srivastava and Ghufran (2013) which disclosed that malted beverages positioned themselves as substitutes for milk followed by health drink preference for fruit juices (28%), which was also emphasized by Acosta (2016) as people are looking to add more fruits and vegetables to their diet, which improves green juice consumption, followed by preference for green tea (21%), a finding which is backed by the study of Craford (2015) as she revealed that an increase in consumption of green tea was more likely to associate with health benefits when compared with consumption of white or black or oolong teas and vegetable juices (20%).

The factors that impacted consumers' preference of health drinks are: Advertisement, Support Drink, Influence, Location, Relaxation, Activeness, Arousal, Health - Consciousness, Taste, Price, and Packaging. This study further concludes that Activeness, Relaxation, Packaging, Arousal, Advertisement, Health - Consciousness, and Taste were given utmost priority while preferring various health drinks. The advanced statistical tools help to distinguish the major factors influencing the purchase intentions. The 'Activeness' factor is a combined analysis of preference factors like - helps to work for longer hours, to stay awake, and to drive more distance for longer time, which is marked as the presiding factor in this study.

Managerial Implications

It has become a challenging factor for marketers to identify the consumer purchase intentions towards health drinks. This paper aims to quench the thirst of marketers for identifying the consumer intentions behind the purchase of health drinks. We strongly believe that this study will give solutions to the marketers to identify the strategic and innovative market approaches accordingly. With perfect, dynamic, and evolving market conditions of the health drink industry in the Indian scenario, it is necessary for the marketers to target and grab the market share by identifying the underlying factors influencing the consumer purchase decision making. This research will be helpful for the innovation teams to penetrate into the right market segments and position their health drinks. The manufacturers and sellers can arrive at creative promotional strategies underlying the theme - Activeness (as the most-favored factor) - to be the output of consumption. The next impactful factor observed included Relaxation, which included components like - mood improvement, consumed while chilling out with friends, which can be further promoted for better market attraction. The other preferred factors like Packaging, Arousal, Advertisement, Health - Consciousness, and Taste can also be captured while promoting the health drinks.

Limitations of the Study and Scope for Future Research

Of the primary data collected, the questionnaires were distributed only in South Bengaluru city as the area of the study. The data were collected in a very limited span of 15 weeks. As most of the respondents in the study did not maintain the records to show the exact expenditure and frequency of purchases and reasons, the information suffers from a recall bias.

This study only considered four health drinks which included milk-based drinks, fruit juices, vegetable juices, and green tea. Future studies can be included with other categories of health drinks, like ayurvedic, herbal, medicated, protein drinks, etc. Further studies can also exclusively be conducted on perceptions of different age groups on health drinks and their consumption patterns. As this study was conducted in only South-Bangalore, other locations can also be explored.

References

- Acosta, G. (2016, November). Healthy juice drink drive dollar growth: Natural beverages, consumables. *Drugstorenews.com*, p.64.
- Ali, E. M., & Mohamed, G. H. (2015). Consumer satisfaction towards selected health drinks in Tiruchirappalli town. *International Journal of Management*, 6(1), 226 232.
- Ali, S. S., & Ahmad, F. (2010). Flexible approach to satisfaction index: An Indian case study of health drink seector. *Int. J. Indian Culture and Business Management*, 3(3), 260-284.
- Armitstead, A. (1998). The national health survey- consumer attitudes to health and food. *Nutrition and Food Science*, 98(2), 95 98.
- Atwal, G., & Williams, A. (2008). Marketing in Postmodern India: Bulgari meets Bollywood. *Indian Journal of Marketing*, 38(1), 3-7.
- Badaam, K. M., & Masroor, S. S. (2013). A study of energy drinks consumption practices among football players in Aurangabad district of Maharashtra in India. *IOSR Journal of Dental and Medical Sciences*, 4 (5), 24-27.
- Bedi, M., & Paul, R. (2013). An analysis of Indian consumers attitude towards health drinks. *International Journal on Customer Relations, 1* (2), 16 24.
- Buxton, C., & Hagan, J. E. (2012). A survey of energy drinks consumption practices among student-athletes in Ghana: Lessons for developing health education intervention programmes. *Journal of the International Society of Sports Nutrition*, *9*(1), p. 9.
- Craford, E. (2015, September 28). More Americans are reaching for green tea, consumer survey reveals. *Food Navigator USA.com*. Retrieved from https://www.foodnavigator-usa.com/Article/2015/09/29/More-Americans-are-reaching-for-green-tea-consumer-survey-reveals
- Duffey, K. J., & Popkin, B. M. (2006). Adults with healthier dietary patterns have healthier beverage patterns. *The Journal of Nutrition*, *136* (11), 2901 2907.

- Euromonitor International. (2018, May). *Better for you beverages in India*. Retrieved from http://www.euromonitor.com/better-for-you-beverages-in-india/report
- Gebely, T. (2012). What is green tea? American Specialty Tea Alliance. Retrieved from https://worldoftea.org/what-is-green-tea/
- Haque, A., Ahmed, K., & Jahan, S. I. (2009). Advertising practices and promotion in the Islamic world under the Shariah observation: A case study on Bank Islam in Malaysia. *Indian Journal of Marketing, 39* (5), 35-40.
- Hawkes, C. (2010). Food packaging: The medium is the message. Public Health Nutrition, 13 (2), 297-299.
- Hofferth, S., & Curtin, S. (2003, November). *Food programs and obesity among U.S. children*. In Annual Meeting of the Association for Public Policy Analysis.
- Hough, G., & Sánchez, R. (1998). Descriptive analysis and external preference mapping of powdered chocolate milk. *Food Quality Preference*, *9* (4), 197 204.
- Indian consumer market likely to be world's largest by 2030. (2013, March, 3). *The Economic Times*. Retrieved from https://economictimes.indiatimes.com/news/economy/indicators/indian-consumer-market-likely-to-be-worlds-largest-by 2030/articleshow/18774548.cms
- Ježovičová, K., Turčínková, J., & Drexler, D. (2016). The influence of package attributes on consumer perception at the market with healthy food. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 64(6), 1919 1926. DOI: http://dx.doi.org/10.11118/actaun201664061919
- Johnson, B. (2002). Has the energy drinks market lost its fizz? *Marketing Week, 29,* 18-19.
- Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika*, 39, 31 36.
- Kaka, N., & Kshirsagar, A. (2016, September). *India's economy: Why the time for growth is now.* McKinsey Global Institute. Retrieved from https://www.mckinsey.com/featured-insights/india/indias-economy-why-the-time-for-growth-is-now
- Kumar, A. (2010). *Brand preferences and customer satisfaction towards health drinks A study in Coimbatore city* (Thesis). Bharathiar University, Bharathiar, Tamil Nadu.
- Lee, K. H., Bonn, M. A., & Cho, M. (2018). Green tea quality attributes: A cross-cultural study of consumer perceptions using importance performance analysis (IPA). *Journal of Foodservice Business Research*, 21(2), 218-237.
- Majumdar, R. (2007). Product management in India (3rd ed., pp.242 244). Delhi: PHI Learning Private Limited.
- Motwani, D., & Agarwal, K. (2012). *Customers' behavior in health food drink product category*. Retrieved from https://ssrn.com/abstract=2433359
- Mukherjee, P. K., Venkatesh, M., & Gantait, A. (2010). Ayurveda in modern medicine: Development and modification of bioactivity. In L. Mander & H.-W. Lui (eds.), *Comprehensive natural products II* (Vol. 3, pp. 479-507). Oxford: Elsevier Science.
- Pappachan, M. J. (2011). Increasing prevalence of lifestyle diseases: High time for action. *Indian Journal of Medicinal Research*, 134(2), 143-145.

- Prakash, C. (2011). Consumer preference to health drinks in Tiruvarur town. *Asian Journal of Management Research*, 2(1), 420 427.
- PwC. (2017, September). *Retail and consumer quarterly newsletter (Q1 FY 2018)*. Retrieved from https://www.pwc.in/assets/pdfs/industries/retail-and-consumer/newsletters/retail-and-consumer-quarterly-newsletter-q1-fy-2018.pdf
- Rukmini, S. (2013, July,18). Lifestyle diseases more common among poor than rich in India. *The Hindu*. Retrieved from http://www.thehindu.com/scitech/health/lifestylediseases-more-common-among-poor-than-rich-in-india/article4924978.ece
- Sekar, P., & Thangavel, S. (2016). A study on consumer's perception and buying pattern towards health drinks with special reference to rural areas of Coimbatore district. *International Journal of Applied Research*, 2 (4), 187-191.
- Silayoi, P., & Speece, M. (2004). Packaging and purchase decisions: An exploratory study of the impact of involvement and time pressure. *British Food Journal*, 106(8), 607-628.
- Silayoi, P., & Speece, M. (2007). The importance of packaging attributes: A conjoint analysis approach. *European Journal of Marketing*, 41 (11/12), 1495-1517.
- Sloan, A. E. (2003). What, when, and where Americans eat. Food Technology, 57 (8), 48 66.
- Srivastava, N., & Ghufran, A. (2013). Analysis of nutritional information disclosure on labels of milk based malted health drinks in India. *Integral Review A Journal of Management*, 6(1), 61 69.
- Strailey, J. (2014, February 27). Juicy culture. *Progressive Grocer*. Retrieved from https://progressivegrocer.com/juicy-culture
- Tamilselvi, J., & Kirubaharan, M. (2011). A study on consumer preference towards health food drinks in Trichy city. *Cauvery Research Journal*, 4(1-2), 6-13.
- Thangaraj, B., Prakash, M., & Nandhini, S. (2014). A study on consumer satisfaction towards health drinks with special reference to Coimbatore City. *Global Journal for Research Analysis*, *3* (1), 11 13.
- Wells, A. (2000). Drinks for young children: The dental and nutritional benefits of milk. *Nutrition and Food Science*, 30(2), 76-80.
- Yanes, M., Durán, L., & Costell, E. (2002). Rheological and optical properties of commercial chocolate milk beverages. *Journal of Food Engineering*, *51* (3), 229 234.

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