CONSUMER PERCEPTION TOWARD HEALTHY DRINKS PACKAGING DESIGN

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Abstract
Healthy living is already become concern in today’s society. According to many studies, people are also increasingly reflective in matters of health and willing to adopt health oriented changes in their eating habits. This change of habits creates a new opportunity in food and drinks industry especially for healthy drinks products. The intense competition between healthy drinks products made consumers is faced with large number of choices. It will be better for the producers to know consumers perceptions toward healthy drinks packaging design to overcome the competitions. The objective of this study is to find out on how consumer perception towards healthy drinks packaging design. In doing this research, Consumer Perceived Value (CPV) theory by Sweeney and Soutar (2000) is used. Basically there are 4 dimension of CPV; Emotional value, Social value, Quality/performance value, Price/value for money. But this research only used the third value which is the Quality/performance value because this research only covers with the consumer’s perception and consumer perceived value of the function of the products. The information processing model also used to understand how consumers build the perceptions. Men and women aged 15-40 years old who live in Bandung was taken as a respondent in this research. The selection of this range of ages is expected to get more variation in the result. By using a judgmental approach, questionnaires have been distributed between 29th July – 8th August 2012 to men and women who concern about health. Three isotonic drinks products were selected as research object. There are five element of packaging, which measured in each product by Likert scale. They are Logo, Image and Other Graphical Elements, Color, Size and Shape, and Benefits. There are also four attribute of perceived value measured; Product Quality Consistency, Product is well made, Product Has an Acceptable Standard of Quality, and the product will last for long time. Found in the analysis, Pocari Sweat successfully become a good example for healthy drinks packaging design, since it draws the highest score for each elements among the products. Pocari Sweat was success in the three level of information processing. It succeeds in implementing the same ambiance from advertisement to the product packaging. Also found that simple logo is more capable to bring the healthiness impression. Using bright color can help to emphasize the healthiness value. Besides, it also can make other important attribute can stand out. The clear visibility of the bottle became important for consumers to see the water inside the bottle.

Keywords: Consumer Perception, Product Design, Perceived Value.

Category: Marketing; Decision-making

Introduction
Nowadays, Indonesian people have started to have an awareness of healthy living. This can be seen from the Indonesian people's lifestyles in recent years. Exercise has become more routine. Since 2010, Roads in major cities like Bandung and Jakarta transformed into areas for exercise in certain days. Many new sports center were built across the city. The healthy-living style itself begins with body exercise, some body treatment and consuming healthy foods and drinks. Meziane states that “Health has been named as the most significant trend and innovation driver in the global food and drinks market” (Thomas Sioutis, 2011, p. 5) (2007). Niva also states that “According to many studies, people are also increasingly reflective in matters of health and willing to adopt health oriented changes in their eating habits” (Thomas Sioutis, 2011, p. 5) (2007). As “health” has
become very important factor for the society, food and drinks producers are asked to meet this need.

In the past three years, Farchad Poeradisastra (chairman of Asosiasi Industri Minuman Ringan Indonesia) rates the growth of packaged drinks sales in Indonesia were above 15% with average of 17.5 billion liter per year. Moreover, in period of January – May 2012, seven food and beverage manufacturers and pharmaceutical expansion and acquisition in the beverage industry worth a total of Rp3.5 trillion (Kementrian Perindustrian RI, 2012). The high growth in packaged drinks industry can be seen from the amount of new packaged drinks launched to the market. This phenomenon has made an intense competition among food and drinks producers.

On every shelf in supermarkets, we can see plenty packaged drinks products who claim that they can improve consumers’ health in various ways. They claimed their product as healthy product by either adding functional components or removing dysfunctional ones; or by adding or reducing particular nutrients, such as reducing fat or sugar resulting in healthier drinks. Information about the nutrients contained in the drink is usually listed on the label printed on the packaging. Unfortunately, the small fonts and dense writing on the label found ineffective in telling the consumer that the drinks are healthy (Thomas Sioutis, 2011). The marketers need a better way in telling consumer about the healthiness of their drinks to overcome competition and differentiate their product.

This research will only covers three isotonic products. Isotonic drinks is chosen because it is one of the popular drinks in the market today. Basically isotonic drinks offer freshness to our body. It is because isotonic contain electrolyte mineral that can effectively replace the lost fluid in our body during our busy activity. Below are some known isotonic drinks in Indonesian market:

- Pocari Sweat is widely known for ion supply drink produced by Otsuka Pharmaceutical Co, Ltd. Pocari Sweat contains electrolyte minerals such as, Magnesium, Sodium, Potassium and Calcium, makes Pocari Sweat is similar to our body fluids. Moreover, Pocari Sweat also contains no preservatives, artificial sweeteners, soda or caffeine, so it is safe for consumption.

- Mizone is the first isotonic drinks in Indonesia that available with variety of flavors (Inspiring Lychee Lemon, Passionate Passion Fruit, Liven Up Orange Lime, Dazzling Apple Guava, Ur Flava Mangga Kweni) produced by Danone. This variety of flavors has its own attraction for the youths. With the tagline “Minuman Isotonik Bernutrisi”, Mizone contain 5 vitamins (E, B1, B3, B6, B12) and 4 electrolyte (Na+, Ca2+, Ma2+, Cl-)

- YOU.C1000 is unique isotonic drink that contains 1000 mg of vitamin C and a distinct taste for rehydration. Produced by PT. Djojonegoro C-1000 under the license from House Wellness foods; one of the largest food companies in Japan. It helps to strengthen immune system and increase stamina, prevents flu and promotes faster recovery, fight bad cholesterol, lower risk of heart attack, lower effects of smoking and air pollution and also boost calcium absorption for stronger bones and teeth.

**Research Objective**

This study aims to find out on how consumer perception towards healthy drinks packaging design. The result of this paper analysis hopefully can be used by marketers and healthy drinks producers as consideration in designing healthy drinks package. Beside of the above explanation, this research also has personal objectives. Hopefully the result of this research can give benefit for author’s business, Agnimaya Graphic House. This research also created to fulfill the final project as one of requirement for the degree of bachelor of management.

**Research Question**

Based on the discussion above, there are several research questions to be used as guideline in doing this research:

a. How is the consumer’s behavior in consuming healthy drinks?

b. How is the consumer perception of the existing healthy drink products and the packaging?
Literature Review

When we talk about health, it will have a broad scope. It can be approached from different scientific perspectives from medical, physiological even social perspectives. But in this case, we will discuss health in consuming food and drinks from consumers’ point of view. Basically, health from consumer point of view has two main dimensions: eating healthily and avoiding unhealthy food (Thomas Sioutis, 2011). According to Sioutis, eating healthily is related to nutritional aspects such as healthy diet, functional foods, less fatty foods and other factors related to health and nutrition. While avoiding unhealthy food is about avoiding eating foods that contain harmful chemicals, too much flavor or other elements that are harmful to our body.

Bech-Larsen & Scholderer states that “Basically, nutrition and health claims are strong marketing incentives for the food industry” (Thomas Sioutis, 2011, p. 7) (2007). Since all healthy drinks claim their products are healthy, consumers are faced with a large number of selection. They might choose a product that they think is the most beneficial for them. Basically, the moment of selecting packaged drinks at point of sale was mostly considered from the product package. Packaging has long been recognized as the silent salesperson (Thomas Sioutis, 2011). Packaging elements like the drinks name, logo, color, the main picture or graphical element, etc. can be an accurate reflection of the product.

Olson and Jacoby offered a definition of packaging: “Packaging can be defined as an extrinsic element of the product” (Ampuero and Vila, 2006, p. 103) (1972) – an attribute that is product-related but not part of the physical product. Basically, packaging has several purposes. The basic purpose is to give physical protection to the product. As the time goes by, marketers start using packaging as marketing media. Cateora and Graham states that “Most of marketing textbooks consider packaging to be part of ‘product’ component of the 4P’s” (Louw and Kimber, 2006, p. 2) (2002).

Packaging design represents the uniqueness and the quality of the product. Packaging can create expectation in consumer’s mind. Richardson proposes that consumers often use extrinsic cues as surrogate indicators of product quality (Underwood and Klein, 2002, p. 60) (1994), especially when the customer is unfamiliar with the brand. Harckham (1989) notes that the package is the shopper’s avenue to the product because it often projects the initial impression he/she forms about a brand, its quality, or value. If the quality of the product matches with what the consumers expected, the buying repetition may happen (Underwood and Klein, 2002, p. 59) (1989). But if it is not perceived, then the consumer will probably not buy the product again (Thomas Sioutis, 2011).

Packaging plays a major role in attracting consumer attention at the point of purchase because of its easy availability (Underwood, 2002). A survey held by Point of Purchase Advertising Institute in UK found that 70% of all purchasing decisions are made in store at the point of sale. Similar survey done by Clive Nancarrow (1998) with the result nine out of ten, at least occasionally, buys on impulse, while Welles (1986) can account for up to 51% of purchases (Ampuero and Vila, 2006, p. 104) (1986, 1998). So, packaging design does really matter especially at the point of purchase. It gives the companies the last chance to persuade consumers to buy the product (Thomas Sioutis, 2011). To help in the analysis, author uses some theories:

Consumer Perceived Value

Helkkula and Pihlström in their journal “From Customer Perceived Value to Value-in-Context Experience” explain that a common customer perceived value definition cited in the services marketing literature is “the customer’s overall assessment of the utility of a product based on perceptions of what is received and what is given” (Zeithaml, 1988). Traditionally, customer perceived value has been viewed as a trade-off between benefits and sacrifices (Flint et al., 2002; Grönroos, 2000) or between quality and sacrifices (Monroe, 1990). The sacrifice can be divided into monetary sacrifice and psychological sacrifice. Sweeney and Soutar (2001) divided perceived value into four dimensions:

- Emotional value is the utility derived from the feelings or affective / positive emotions arising from consuming the product.
• Social value is the utility derived from the product's ability to enhance the self-concept of social consumer.
• Quality/performance value is the utility derived from the perception of the quality and performance expected of the products.
• Price/value for money is the utility derived from the product due to the reduction of the cost of short-term and long-term costs.

Information Process
Information processing is a series of activities by which stimuli are perceived, transformed into information, and stored. Initiated from the sensory senses, not all of the possible stimuli can be received and processed by sensory systems, but is why how senses preferable to pay attention into something more attractive. The more attractive stimuli can be something louder, larger, or even more colorful among the others. But the vision dominates a sufficient role to contribute in the process, since it has an impact of consumer imagery on positioning and repositioning, impact of culture on consumers’ perceptions of value and quality, and also role perception in consumer evaluations of product. Perception consists of the first three steps or stages of information processing: exposure, attention, and interpretation.

Exposure occurs when a stimulus comes within range of a person’s sensory receptor nerves (vision). It obtained from the available information in the environment. At the attention stage, stimulus activates one or more sensory, there is some stimulus factors such as size and intensity, color and movement, position, contrast, information quantity, isolation, format, etc. Attention is also can be form as an individual characteristics, situational, or stimulus characteristics. From Individual characteristics, it is focus on consumer learning process from the past experiences and their expectation. While stimulus characteristics is focus on semiotics. Interpretation is the assignment of meaning to stimuli that have been attended to. Interpretation is a function of individual as well as stimulus and situation characteristics. Cognitive interpretation appears to involve a process whereby new stimuli are placed into existing categories of meaning. Affective interpretation is the emotional or feeling response triggered by the stimulus, where affective process leads to emotional one. During interpreting images, consumer assigns a value to an attribute. Memory is a stage where the information is stick in to mind.

Packaging Design as Positioning Tools
Olson and Jacoby (1972) defined packaging as an extrinsic element of the product – an attribute that is product-related but not part of the physical product (Underwood and Klein, 2002, p. 60). Ivanez Gimeno states that from the managerial point of view, in order for packaging to suitably develop its function as marketing tool, both graphical and structural will be subject to market research undertaken by the company for the optimal image that the company want consumer to perceived (Ampuero and Vila, 2006, p. 103) (2000).

According to Raphael and Olsson, packaging acts not only as communication vehicle for transmitting symbolism, but is important for its own symbolic contribution to the total understanding of the corporation or brand (Underwood, 2003, p. 62) (1978). Several managerial trends suggest a growing role for packaging as a brand communication vehicle. According to Spethmann and Bertrand, indications of these roles include an increase in nondurable product buying decisions at the store shelf, a reduction in spending on traditional brand-building mass-media advertising, and growing managerial recognition of the capacity of packaging to create differentiation and identity for relatively homogeneous consumer nondurables (Underwood and Klein, 2002, p. 58) (1994, 2002).

Harckham (1989) notes that the package is the shopper's avenue to the product because it often projects the initial impression he/she forms about a brand, its quality, or value (Underwood and Klein, 2002, p. 59) (1989). For products that are purchased not their final form, such as many food and drinks items, consumers often relies on the package to develop an impression of the products in its prepared state (Underwood and Klein 2002).

Packaging Elements
Packaging communicates brand personality via multiple structural and visual elements including a combination of brand, logo, colors, font, package materials, pictorials, product descriptions, shapes and other elements that
provide rich brand associations (Underwood, 2003). According to Hine, generally packaging elements can be separated into two categories; graphical and structural elements (Underwood, 2003, p. 65) (1995). The graphics elements consist of Color, typeface, logos and other graphical elements. Structural elements relate to shape, size, material, etc. of the product. Based on several journals and packaging expert, the most important elements of packaging are:

- Color is considered to be the most important elements in packaging design. The first thing the consumer will notice from distance is the color of the package. Package colors provide brand identification and visual distinction, and also produce emotions and associations that reinforce a brand’s benefits and/or symbolism (Underwood, 2003). Hine (1995) notes that individuals experience color in three different levels: physiological, cultural, and associational (Underwood, 2003, p. 65) (1995). The associational experience reflects the color expectations for a particular product category and/or product as a result of marketing efforts over time.

- Image and graphical element also play an important role in packaging. Placing a picture of the product on food packages significantly improve brand beliefs and has positive effects on attitudes towards the package (Underwood and Klein 2002). Also other graphical elements like logo and other ornament can determine the value of the product.

- Size and Shape also a critical element in representing the value of the product. The shape and size of the package related with the ergonomic level. Some enduring brands with unique package shapes have reached an almost iconic status due to a familiarity and consistency in package design (the original glass Coca-Cola bottle with its distinctive hourglass shape) (Underwood and Klein 2003).

**Research Methodology**

The method consists of literature study, questionnaire spreading, and interview. The questionnaire consists of three big parts. The first part is about respondent profile, the second is about consumer behavior in consuming isotonic drinks, and the third part is about consumer perception of the existence isotonic drinks. The third part itself divided into two sub-parts; perceived value and perception of the packaging design itself. Questionnaire is basically created based on several attributes found in the literature review. The perceived value questions were taken from perceived value questionnaire by Sweeney and Soutar (2001).

Regarding to the stated scope and limitation, Indonesian men and women aged between 15-40 years old is selected as the population. The selection of this range of ages is expected to get more variation in the result. The research was conducted in Bandung, West Java between 29th July – 8th August 2012. The result of sampling determination is 204 samples. In order to avoid the occurrence of sample error, there are 240 questionnaires distributed. From 100 physical questionnaires that were spread, 90 of them were back. From online media, the author gets 132 respondents. So the total data gathered is 222 questionnaires.

The data was gathered from the distributed questionnaires to the Indonesian men and women based on the amount of sample determined from the previous methods. The data is transformed into numbers as a code for the further analysis. Microsoft Excel used to process the data. These are the analysis that will be carried out within the research.

**Finding and Analaysis**

**Consumers Behavior**

The result from data analysis shows that 38% of the respondents only consume isotonic drinks once in a month, 21% of the respondents drink isotonic drinks twice a month, and with 1% different, 20% of the respondents drink isotonic drinks more than 4 times in a month. Which mean there is a quite big number of respondent who have isotonic drinks as their favorite package drink. Mostly, respondents consume isotonic drinks after exhausted from their daily activity and after taking an exercise, and they seek for refreshment and the benefits from it. The most benefit that the respondents expected are to relieve thirst and for ions replacement for their body. Ironically, there are only 3% of the respondents who consume isotonic drinks for its complete nutrients offered.
Consumer Perceptions of Isotonic Drinks Product

By using the factor analysis, the researcher successfully mapped 9 attribute value measured.

Table 1. Products’ Score

<table>
<thead>
<tr>
<th>Sub Variable</th>
<th>Indicator</th>
<th>Score Pocari Sweat</th>
<th>Score Mizone</th>
<th>Score YOU.C1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Value</td>
<td>Product quality consistency</td>
<td>4.936</td>
<td>3.963</td>
<td>4.82</td>
</tr>
<tr>
<td></td>
<td>Product well made</td>
<td>4.873</td>
<td>4.076</td>
<td>4.88</td>
</tr>
<tr>
<td></td>
<td>Product has an acceptable standard</td>
<td>4.972</td>
<td>4.067</td>
<td>4.84</td>
</tr>
<tr>
<td></td>
<td>Durability of the packaging</td>
<td>4.148</td>
<td>3.581</td>
<td>3.54</td>
</tr>
<tr>
<td>Isotonic Drinks Packaging Design</td>
<td>Logo</td>
<td>4.355</td>
<td>3.716</td>
<td>4.04</td>
</tr>
<tr>
<td></td>
<td>Image &amp; other graphical elements</td>
<td>4.481</td>
<td>3.729</td>
<td>4.21</td>
</tr>
<tr>
<td></td>
<td>Color</td>
<td>4.878</td>
<td>3.698</td>
<td>4.14</td>
</tr>
<tr>
<td></td>
<td>Size and shape</td>
<td>4.824</td>
<td>3.995</td>
<td>3.98</td>
</tr>
<tr>
<td></td>
<td>Benefits</td>
<td>4.617</td>
<td>3.698</td>
<td>4.37</td>
</tr>
</tbody>
</table>

Sweat and YOU.C1000 originally is Japan product, while Mizone is produce by AQUA-DANONE that already been known in Australia, New Zealand, and China. So no wonder the three products get a good score for the first three attributes from respondents. But unfortunately, tragedy that happened to Mizone in 2006 apparently still leaves bad memories to consumers. In 2006 Mizone had to pull back all of their products due to an issue that states Mizone contain high level of preservatives that can cause lupus disease (Detik News, 2006).

Based on author’s interview with respondent No. 41, since the issue he only wants to drink Mizone if there is no other choice. Another unique result from the data above is the three products get a fair score for the “product will last for long time” attribute. The scores are quite far down below the other attributes. Respondents No. 41 and No. 73 were asked why they give a low score for this attribute. From their answer, author made a conclusion that the taste of isotonic drink is still strange for Indonesian people. They cannot clearly distinguish the taste of the good and the expired one, especially after the seal open for more than a day. So usually, they throw the drinks away if it has been more than a day.

As one of the Pioneer of isotonic drinks, Pocari Sweat successfully became a good packaging design example for healthy drinks product with the average score of 4.631 points. Pocari Sweat was success in the three level of information processing; exposure, attention, and interpretation. In the exposure stage, Pocari Sweat successfully embedded their typical color (blue and white) through their advertisement.

So when we talk about blue and white in packaged drinks scope, people associate it with Pocari Sweat. Pocari Sweat also successfully associates the blue color itself with ion in every advertisement. At the attention stage, their blue and white typical color can be easily identified by the consumer, especially when they are faced with many other products. The blue contrast make their product can stand out from the others. By the success from the first two steps, it is not difficult for consumers to interpret the value offered by Pocari Sweat. There are similarities between Pocari Sweat and YOU.C1000 packaging design. It both gets a high score in “color” and “image and other

three in isotonic drinks market in Indonesia. Basically the producer of these three products are already been known internationally. Pocari

[C1000]
graphical elements’ attributes. We can see that both packaging have a bright white overall color, and simple graphical elements. Apparently Pocari Sweat as the pioneer of isotonic drinks in Indonesia successfully associates the white bright color for isotonic drinks. YOU.C1000 attained big success with their big lemon/orange image. Those stands out image can simply give consumers information about the value offered at the attention stage.

Unfortunately, Mizone packaging design gets the lowest score from all attribute. The size and shape of Mizone bottle is unique indeed. But it is still in fair category. Moreover, the consumers cannot easily identified Mizone easily only by the bottle’s shape. Although Mizone is the first isotonic drinks that using dark blue color for their bottle, apparently it was not a good decision. The color of the bottle cannot stand out from the other product. Besides, it makes low visibility of the bottle. After a short question and answer session with respondent No. 41, No. 73, No. 101 and No. 109, it came to a conclusion that it’s not only the dark blue color of the bottle that bother, but also the low level of visibility of the bottle. When we talk about healthy products, consumers are likely wants to now the detail about what they will consume. That will make the bottle visibility is also important thing so that consumers can easily see the water inside the bottle.

In general, the good packaging design attribute for isotonic drinks are describe below:

- **Logo:** Simple logo and fonts are more capable to bring the healthiness impression.
- **ImageandOtherGraphicalElements:** Graphical attribute must be designed harmonious with each other. The dense writing is ineffective if we want to catch consumers’ attention.
- **Color:** Using consistent color in all information process stages is important. Also the bright overall color is critical to gives the product the impression of
- **Shape and Size:** The unique shape can be clearly seen if the bottle uses the bright color. Otherwise, it will omit the unique shape.
- **Benefits:** using the right color and the right image with the right size and positions can make consumers identify the benefits of the products easily.

**Recommendation**

Since Health has been named as the most significant trend and innovation driver in the global food and drinks market, it is better for healthy drinks producers, especially for isotonic drinks producers to design their packaging to look healthy. To meet the consumers expectation about the healthiness of the product, producers must success the first three steps of consumer information processing: exposure, attention, and interpretation. To fulfill this condition, packaging design cannot stand by itself. Producers need to implement the comprehensive marketing practice. Consumer need to introduced, educated, and exposed to the brand repeatedly and consistently using every media possible. Try using the same term in every advertisement; provides the same ambience, etc.

After the consumers are well educated and familiar with the product, producers need to design the harmonies packaging design with the value offered. Provide a suitable ambience so that consumers can easily identify the product from what has been exposed to them. It can be done by using the same color, image, or other graphical elements which has the unique characteristic of the products. In this case, Pocari Sweat uses their blue and white unique composition and YOU.C1000 use a big lemon/orange image. Simple logo and fonts are more preferable to make consumers not only focus to the logo. The right composition of the color is also important. Try not to kills other important attribute with using less contrast color.

To emphasize the healthiness value, try to use bright color to overall ambience of the packaging. Other than to highlight the impression of cleanliness, it can also make other images and graphical elements to stand out. Try not to use the dark color because it can omit the shape of the bottle. Avoid using low visibility of the bottle. It can block consumers to see the contents of the bottle. And do not use thin bottle material because it can make the impression of not long lasting.

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