

Journal of Physical Education Research, Volume 2, Issue III, September 2015, pp.01-06 ISSN: Print-2394 4048, Online-2394 4056, IBI Factor: 4.29

WHEY PROTEIN SUPPLEMENT BRAND POSITIONING: A MULTIDIMENSIONAL SCALING APPROACH

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How to cite this article: Bagchi, A. (September, 2015). Whey protein supplement brand positioning: A multidimensional scaling approach. Journal of Physical Education Research, Volume 2, Issue III, 01-06.

Received: May 31, 2015 Accepted: August 29, 2015

ABSTRACT

Brand positioning is regarded as a weapon for brand implementation in competitive markets and brand perceptions in the minds of consumers. The purpose of this study was to identify unrecognized dimensions affecting the consumer purchasing behavior and to find out the relative position of different brands (such as optimum nutrition, muscle blaze, ultimate nutrition, dymatize, muscle tech and universal nutrition) of whey protein supplements in respect of customer perception. Twenty male $(20.85 \pm 1.84 \text{ years})$ weight-lifters and bodybuilders of LNIPE, Gwalior were asked to give their preferences of one whey protein supplement over another on a 8-point scale. The results of this study indicated that two most important dimensions that are effective on consumer evaluations of whey protein supplements brands are found to be brand image and price. The map also presents the market opportunities for new entrants and for those brands to be repositioned.

Keywords: Brand positioning, whey protein supplements, perceptual mapping, weight-lifters and bodybuilders.

1. INTRODUCTION

Brand positioning refers to the decision and activities intended to create and maintain a certain concept of the firm's products in the customers mind (Chernatony, & Riley, 1997). Positioning regulate the overall perception of the potential customers in relation to the brand, product or organization in general. For formulating understanding of how consumers perceived the relative strength and weaknesses of different products in the competitive market positioning map is used. It constructs knowledge about the similarities and dissimilarities between different competing products in the market. It also assists the process by

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positioning of new products and by re-positioning of existing products (Kumar, & Srivastava, 2013).

For formulating and tracking of promotional strategy in the competitive market, positioning map can be used as an important tool. It enables manager to identify gaps and opportunities in the market and allows monitoring of effects of past marketing communications (Arora, 2006). Gwin and Gwin (2003) reported in their study that in formulating a positioning strategy, the target market must be considered by the marketers, the products dissimilarity or superiority than of the competitors, the value of this gap to the target market and the ability to demonstrate or communicate this difference to the target market. Ghose and Lovengard (2001) studied the perceptual and preference-based measures that can provide information which is useful for managers for making segmentation, positioning and targeting decisions. In this study non-diet and diet was used in the horizontal dimension of perceptual map and on the vertical dimension cherry flavor and regular flavor was used for cola brands.

In terms of strategic decisions for the success of a brand, it is a matter of priority to understand the consumer behavior and strategically positioning the brand in a way to surmount the competition and set a relation with the target market via differentiation (Friedman, & Lemon, 1989). From many years brand positioning has been provided as the weapon in the competition. Even by means of positioning, brands try to construct a sustainable competitive vantage via product attributes in the consumers mind (Gwin, & Gwin, 2003).

Multidimensional scaling is a sequence of techniques for exploring similarities or preferences among objects. These objects can be products, organizations, brands, outlets, etc. In this technique, similarities or preference of the objects are measured on some dimension, and accordingly the objects are positioned in the multidimensional space for understanding the brand positioning. Through multidimensional technique, a researcher can get an idea about the consumer's perceived relative image of a set of objects. The multidimensional scaling is also known as perceptual mapping. In this technique, the consumer assessments of overall similarity or preferences get transformed into distances represented in multidimensional space (Verma, 2013)

For positioning of products and brands in marketing this multivariate analysis is widely used. This analysis helps in giving a graphical representation to the position of the products or brands in the market by placing the data of different brand of supplements in perceptual map and also to compare them. The study analyses the concept of multidimensional scaling and the current brand positioning of supplements among inter-varsity level weight-lifters and bodybuilders. And also gives a SPSS multidimensional scaling output of the positioning of whey protein supplements. The research study can be used as a stepping stone for further research in this area.

The objective of the study was to identify unrecognized dimensions affecting the consumer purchasing behavior and to find out the relative position of different brands of whey protein supplements in respect of customer perception.

2. METHODS AND MATERIALS

2.1 Subjects

Twenty male (age- 20.85 ± 1.84 years) weight-lifters and bodybuilders of LNIPE, Gwalior, India from the weightlifting match practice group were selected as the participants for the present study. The participants were selected by using purposive sampling. Their age ranged from 18 to 24 years.

2.2 Variables

The six brands of the whey protein supplements were selected for the study. They were optimum nutrition, muscle blaze, ultimate nutrition, dymatize, muscle tech and universal nutrition.

2.3 Collection of Data

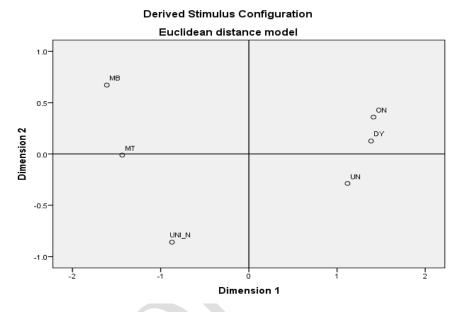
The subjects were asked to rate 6 whey protein supplements by showing the cards that consists the name of a pair of supplements. All possible pair of supplements were shown to each participants, and the subjects were asked to rate their preferences of one supplement over the other on an 8-point scale. If the subjects perceived that the two supplements were completely dissimilar, a score of 8 was given, and if the two supplements were exactly similar, a score of 0 was given.

3. RESULTS

Figure 1 shows the perceptual map that is produced as a result of the multidimensional scaling analysis in relation to the six whey protein supplement brands. The dispersion of these dimensions on a two-dimensional space map can be seen from figure 1. The stress value obtained is found to be as 0.00170 and R^2 value of the model is 0.999. RSQ values are the proportion of variance of the scaled data (disparities) in the partition (row, matrix, or entire data) which is accounted for by their corresponding distances. For the final solution of the model and to evaluate the model during estimation, stress is used as a criterion. S1 = 0 refers to perfect fit between the model and the data. Goodness of fit as an additional measure is the squared correlation coefficient (RSQ) between actual

distance and the fitted distance. An RSQ value of 1 indicates a perfect fit between the data and the model.

Figure 1: The perceptual map illustrating the positions of six whey protein supplement brands



4. DISCUSSION

When a brand possesses a special or unique characteristic in product categories that is different from its competitors, it always attracts the consumers. They use the brands of that special or unique characteristic and refer to others for use (Antonio, Sanders, & VanGammeren, 2001). Brand positioning is a relative concept; it is conceptualized with comparative assessment of a brand with others. The key idea in positioning the brand categories lies in identifying the uniqueness in the product (Aaker, Batra, & Myers, 1992). For the purpose of knowing the positions of different supplement brands and to see the gap between them, perceptual map was produced as a result of the multidimensional scaling analysis. The distances between the brands in the perceptual map helps one to understand that how similarly those brands are perceived by consumers. This graphical representation (perceptual map) also helps in presenting the market opportunities for new entrants and for those brands to be repositioned (Arslan, Müge, Yalçın, & Çakır, 2001).

In this perceptual map, the customer perceptions of various whey protein supplement brands on the two dimensions of brand image and price can be seen. The brands such as Optimum Nutrition and Dymatize are perceived to be similar

in whey protein supplement brand and are more on the upper right side of the perceptual map (Ha, & Zemel, 2003). It shows that they are highly preferable by this sample of consumers and also higher in price. Muscle blaze found to be cheapest as compare to other brands and it is located at the upper left side of the map. It also has a brand image that is unique and has no real competition with others. It shows that it is highly preferable along with lower price. It can be noticed that Ultimate nutrition has one area of the map to itself, suggesting higher in price and slightly less preferable. Universal nutrition is on the lower left side of the perceptual map as it shows that it is less preferable by the selected samples and slightly cheaper than Optimum Nutrition, Dymatize and Ultimate Nutrition (Hoffman, & Falvo, 2004). Muscle Tech is also found to be very cheaper than other whey protein except Muscle Blaze along with average preference.

5. CONCLUSIONS

Regarding the whey protein supplement market and on the basis of selected samples, the most important two dimensions that are effective on consumer's evaluations of different whey proteins were found to be Brand image and price. Any brand that aims to be successful in that market should primarily work on building Brand image and providing a reasonable price and offers that satisfies the Customers. Out of the 6 brands that are included in this study, Muscle Blaze, Optimum Nutrition, Dymatize and Muscle Tech seem to be positively perceived in terms of Brand image whereas Ultimate Nutrition and Universal Nutrition have a relatively negative position. On the other dimension (brand price) Optimum Nutrition, Dymatize and Ultimate Nutrition seem to be positively perceived as compared to Universal Nutrition, Muscle Tech and Muscle Blaze. Further the perceptual map shows that Optimum Nutrition and Dymatize are found to be more similar in both the dimension as the gap between these two brands are very less. But the brand muscle blaze has the unique brand image and has no real competition with others. This may be due to its cost as it is much cheaper than other brands.

6. REFERENCES

- Aaker, D.A., Batra, R., & Myers, J.G. (1992). *Advertising management (4th ed.)*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
- Antonio, J., Sanders, M., & VanGammeren, D. (2001). The effects of bovine colostrums supplementation on body composition and exercise performance in active men and women. *Nutrition*, *17*, 243-247.
- Arora, R. (2006). Product positioning based on search, experience and credence attributes using conjoint analysis. *Journal of Product and Brand*

- Management, 15(5), 285-292.
- Arslan, Müge, F., Yalçın, A., & Çakır, F. (2001). Comparison of discriminant analysis and multi-dimensional scaling techniques used in determining the position of internet service providers in the Turkish market. 8th Recent Advances in Retailing and Services Science Conference, (pp.16-19), Vancouver, Canada.
- Chernatony, L., & Riley, F. (1997). The chasm between manager's and consumers' views of brands: The experts perspectives. *Journal of Strategic Marketing*, 5, 89-104.
- Friedman, J.E., & Lemon, P.W.R. (1989). Effect of chronic endurance exercise on the retention of dietary protein. *International Journal of Sports Medicine*, 10,118-123.
- Gwin, G.F., & Gwin, C.R. (2003). Product attributes model: A tool for evaluating brand positioning. *Journal of Marketing Theory and Practice*, 11(2), 30-42.
- Ha, E., & Zemel, M.B. (2003). Functional properties of whey, whey components, and essential amino acids: Mechanisms underlying health benefits for active people. *Journal of Nutritional Biochemistry*, 14, 251-258.
- Hoffman, J.R., & Falvo, M.J. (2004). Protein-which is best? *Journal of Sports Science and Medicine*, 3, 118-130.
- Kumar, S.J., & Srivastava, R.K. (2013). An exploratory study of product and brand positioning typologies with respect to pharmaceutical companies. *Review of Integrative Business and Economics Research*, 2(2), 638-654.
- Verma, J. (2013). *Data analysis in management with SPSS software*. New Delhi, India: Springer.