

The Impact of Informational Package Elements on Consumer Purchase Behaviour of Breakfast Cereal Products: The Case of University Students in Masvingo, Zimbabwe.

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Abstract

Most studies on product package design elements have conceptualised the role of visual package elements such as colour, shape, size and picture in influencing consumer buying behaviour of fast moving consumer goods. Limited researches have focused on the impact of informational package elements on the purchase decisions of university students, therefore, this paper sought to examine the impact of informational package elements (brand elements, nutritional information, and food label information) on university students' purchase decisions of breakfast cereals. A descriptive research design was employed and the random sampling strategy was used to identify and select study participants constituting 100 respondents. The research findings revealed that the brand name, nutritional information on energy and sugar, and use instructions are critical determinants of university students' purchase decisions. Therefore, the implication for managers is that, the noted variables should be strategically managed as they are vital extrinsic cues that directly trigger consumer interest and shape their purchase decisions.

Key words: packaging, informational elements, consumer purchase behaviour, breakfast cereals

1. Introduction

The function of packaging has transformed over the years. Packaging was solely used as a means of protecting the product and making sure that the product could be consumed without being altered as it is transported from one point to the other. The dynamic nature of the marketing environment has propelled packaging to have other functions which also act as powerful marketing tools. According to Kotler et al. (2008), packaging has been transformed to become one of the most important and powerful tools for promoting products, eye-catching the attention of prospective consumers and communicating the value of the brand to the target market. In reality, packaging plays multiple roles that range from its ability to position a brand on a unique and appealing position that stimulates consumer purchase decisions; it conveys both descriptive and persuasive information about the brand. Wells et al. (2007), report that besides packaging being used to protect the product against damage and smudge during storage and selling, it is also being employed as a marketing tool to build and fortify brand equity. However, Keller (2008) points out that packaging provides consumers with a visible logo that allows them to quickly know the product inside the package. Packaging acts as a cue and a reliable source of brand information. It conveys information on pricing, quantity, quality, and also provides information regarding ingredients and direction of use.

The packaging design and informational elements should be determined by considering the requirements (needs and wants) of consumers and the cost implications they have on the brand. For this to happen, marketers should be able to understand how consumers behave especially with reference to how informational elements assist consumer's choice and the final purchase decision of the brand. According to Chaudhary (2011), packaging informational elements act as a final selling proposition that stimulate impulsive buying behaviour and from a marketer's perspective they reduce promotional costs. Many authors have also elaborated on the contention that food labels are one of the informational elements that are significant to the customer in the evaluation of food before purchase (Gonzalez, 2009, and Butkeviciene et al., 2008). Food labels are an important means of making sure that food is produced and marketed at the required standards and they guard against violating the interests of the buyers. Umberger et al., (2003) explain that in the eyes of the consumer food labels signify food safety, quality and hygiene. In light of the above it has been

observed that there has been a paradigm shift on how companies perceive the role of informational elements in provoking consumer purchase decisions and as such marketing managers and product package designers have attempted to work hand in hand so that they tailor make their information to the target market.

Upon the foregoing preamble, this study attempts to examine closely how informational elements (brand name, ingredients and food labels) affect the purchase decisions of university students. As a way of attaining our objectives we took into consideration how these informational elements relate to one another. In this scenario we would want to establish whether university students consider informational elements before they make a purchase and to what extent do they really impact on their purchase decisions? This paper is structured in the following manner, the first stage involves reviewing related literature and attempts to summarise key aspects on how informational elements have affected consumer purchase decisions in general. This part is then followed by an outline of the theoretical framework which highlights the possible model and hypothesis that are significant to guiding the entire research and data analysis. After this, the methodology employed in this research is discussed and the final data analysis is done. At the end, the paper outlines the managerial implications that are deduced from the research findings.

2. Review of Literature

2.1 Packaging

The cutthroat competition currently obtaining in the global marketplace requires that organisations adopt competitive marketing communication strategies that will enable their products to rise above the clutter so as not only to get customer attention but to ensure repeat purchase and customer loyalty. Research has shown that product packaging has assumed a role of strategic importance by becoming both a brand communication vehicle as well as an integrative aspect of the product which determines the success or failure of a given product (Schoell, 1985). To this end, it is imperative to emphasize that in order to derive competitive advantage firms should consider packaging decisions as a critical component of the total marketing strategy (Panwar, 2004). According to Panwar (2004) packaging can be defined as, "...the act of containing, protecting and presenting the contents through the long chain of production, handling and transportation to their destinations in as good a state, as they were, at the time of production". However, beyond these functional roles that packaging plays in product management, there exists the communication role where packaging becomes the voice and face of the image and company identity.

According to Shimp (2010), packaging can be described as the least expensive form of advertising, a silent sales man and a five-second commercial. It is fundamental to underline that a package is the product itself as it performs key communication and sales roles at the point of purchase since consumers have limited time at their disposal especially where low involvement products are concerned. The growing importance of packaging has been prompted not only by the need to communicate to customers about the product in the package so as to assist and influence them in making careful and informed decisions (Ahmed, Ahmed & Salman, 2005). In addition, Shimp (2010) argues that the package also serves among other things, to draw attention to a brand, break through competitive clutter at the point of purchase, justify price and value to the consumer, signify brand features and benefits, convey emotionality, and ultimately motivate consumers' brand choices. Packaging is particularly important for differentiating homogenous or unexciting brands from available substitutes by working uninterruptedly to say what the brand is, how it is used, and what it can do to benefit the user. It is also important to note that packaging communicates two very crucial attributes of an offering which include the uniqueness and originality of the product. The latter features in turn influence customers' judgement of a product's quality and preference (Silayoi & Speece 2004; Underwood, Klein & Burke 2001). However, while packaging plays a significant strategic role in communication, it should be noted that if a package holds too much information, misleading or inaccurate information customers may not only be confused but lose interest and trust in the product (Silayoi & Speece 2007).

2.2 Informational elements

Quite considerable researches have been undertaken to explore the influence of packaging elements on consumer purchase decisions, (Silayoi and Speece, 2004; Underwood et al., 2001). Whilst most literature focuses on the impact of mainly visual elements, such as pictures, colour, size, shape (Rettie, and Brewer, 2000; Underwood, 2003), the informational elements such as brand elements, nutritional information and food label are increasingly becoming important in influencing consumers' purchase behaviour mainly because consumers as buyers base their judgements

on the reasons for or for not purchasing on information provided on the actual package. In the pharmaceutical industry, informational packaging is critically important as it provides essential information on medicinal products. According to the World Health Organisation's Guidelines on Packaging of Pharmaceutical Products (2002), informational packaging design elements provide pertinent information such as: the name, strength, quantity and physical description of the medicinal product; directions for use and precautionary statements, the storage instructions; and period of use (related to the expiry date). The growing importance of informational packaging has been necessitated by the increased consumer education, health consciousness and the need to communicate unique potent messages about the actual product, production process, material compositions, and expected nutritional gains among others.

2.3 Brand elements

Kotler and Keller (2012) suggest that a brand is one of the most valuable intangible assets of the company and is at the heart of the firm's products or services. According to the American Marketing Association, a brand simply refers to "a name, term, sign, symbol, or design, or a combination of them, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors". Whilst most brand practitioners argue that the package design is an important component of the brand strategy (Dadzie, A. and Boachie-Mensah, 2011), literature on packaging information (Silayoi and Speece, 2004; Estiri et.al 2010) tends to view the brand elements as a key ingredient of the product informational package elements. In food packaging, the brand strategy plays a pivotal role in reducing time spent on consumer search as it facilitates brand identification (Bassin, 1988). The proponents of branding posit that in the consumers' mind, a well known brand can be dependent upon and consumers tend to perceive the quality of the products based on the brand strategy (Aaker, 1991). The informational package therefore institute brand identification as the brand name printed on the actual package which can be visible thereby arousing interest and stimulating purchase decision. A well coordinated branding strategy with a good brand name, slogan, logo, symbols, and character can be influential in the purchase of breakfast cereals.

2.4 Food label information

Estiri et.al (2010) posit that informational packaging elements are a critical factor in the consumer decision-making process solely because they communicate specific messages and relay certain information about the product, the manufacturer and or the place/country of origin to the consumers. Coulson (2000) suggests that many consumers in today's business market pay particular attention to product label information as they have become preoccupied with health and nutrition issues. In the purchase of breakfast cereal products, Silayoi and Speece (2004) argue that the product package displayed in the retail outlet should trigger favourable consumer response, that is, positively influence the consumer's purchasing decision resulting in the actual purchase. The difference between visual package elements and informational elements lie on the proposition that, the essence of visual package design is to arouse and stimulate interest whilst informational elements tend to present information on the actual reason to buy.

2.5 Nutritional information

With the growing trend towards healthier eating (Coulson, 2000), the role of nutritional information on product package is significantly increasing in shaping and guiding consumer purchase decision on food products. Mitchell and Papavassiliou (1999) argue that 90% of consumers prefer to have nutritional information presented in the same way for food products to ensure ease readability. It is therefore prudent for producers of food products to incorporate and display nutritional information relating to nutritional contents such as proteins, fats, vitamins, fibre, calcium, sugar among others. However, too much information on the product package may cause consumer confusion (Silayoi and Speece, 2005) which might create a purchasing dilemma and undermine the essence of product package design. Nevertheless, nutritional information is vital in the packaging of food products due to increased consumer awareness on the need for healthy diet which is a key determinant in consumer purchasing decision.

3 Theoretical framework and research hypotheses

Despite the availability of numerous researches on the impact of informational package elements on consumer purchase behaviour, there seems to be no agreement on how consumers will react to different socio-cultural set-ups. In this study, the following informational elements: brand elements, nutritional information and food labels are going to be broken down so that the sub variables will be examined to see how they influence the purchase behaviour of university students. The outlined informational elements are divided as follows: brand elements (brand name, slogans,

logos, symbols and flavour), nutritional information (energy, protein, fat, vitamins, fibre, calcium and sugar) and food label information (instruction of use, expiry date, weight/volume, ingredients and storage conditions). The ultimate findings would then be employed by marketing managers to develop best fitting strategies on how best they may manipulate consumer purchase behaviour through the use of informational package elements. The following model (Figure 1) on the next page is drawn using the sub-variables outlined above and as such form the basis upon which our hypotheses are crafted. Each of the coined hypotheses will be tested using Pearson Chi-Square tests.

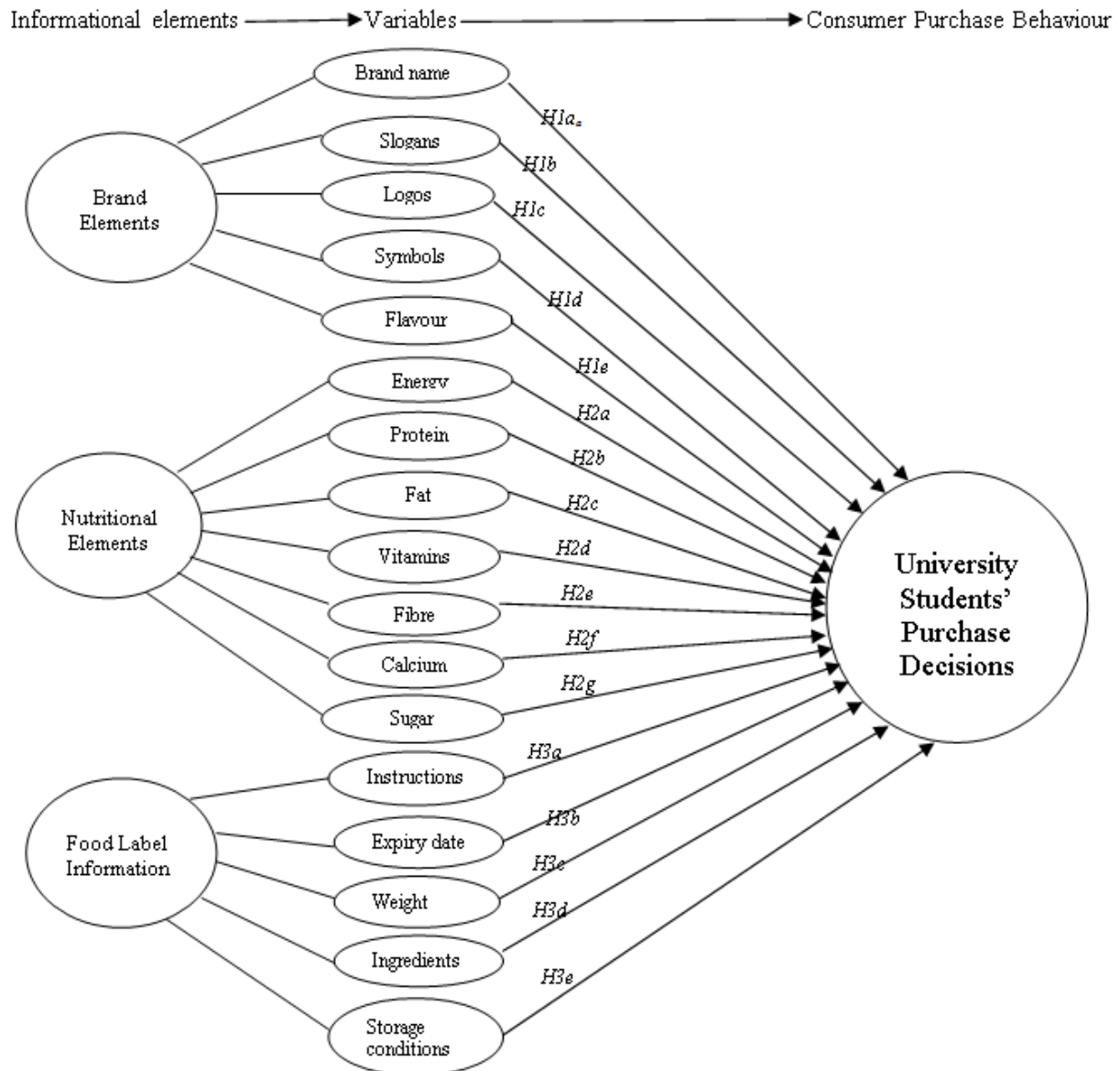


Figure1. A model representing the impact of informational package elements on purchase decisions

H_{1a}: Brand name has a significant impact on students' purchase decisions

H_{1b}: Slogans have a significant impact on students' purchase decisions

H_{1c}: Logos have a significant impact on students' purchase decisions

H_{1d}: Symbols have a significant impact on students' purchase decisions

H_{1e}: Flavour has a significant impact on students' purchase decisions

H_{2a}: Energy has a significant impact on students' purchase decisions

H_{2b}: Proteins have a significant impact on students' purchase decisions

H_{2c}: Fat has a significant impact on students' purchase decisions

H_{2d}: Vitamins have a significant impact on students' purchase decisions

H_{2e}: Fibre has a significant impact on students' purchase decisions

H_{2f}: Calcium has a significant impact on students' purchase decisions

H_{2g}: Sugar has a significant impact on students' purchase decisions

H_{3a}: Instructions of use have a significant impact on students' purchase decisions

H_{3b}: Manufacturing and/or expiry date have a significant impact on students' purchase decisions

H_{3c}: Weight/volume has a significant impact on students' purchase decisions

H_{3d}: Ingredients have a significant impact on students' purchase decisions

H_{3e}: Storage conditions have a significant impact on students' purchase decisions

4 Methodology

This study used a quantitative research strategy where a descriptive research design was applied in order to assess the impact that informational package elements have on consumer purchase behaviour of breakfast cereal products. The study used a random sampling strategy which allowed the researchers to interview only those students who were purchasers and consumers of the cereal products. A filter question was employed to screen out those who had purchased and used the cereal products for less than a year. The total sample was one hundred (100) and was composed of 60 males and 40 females. The rationale for this composition is that the university has a higher proportion of male student population than the females and as such there was a need to have a representative sample for both groups.

The researchers used a questionnaire as the research instrument to collect data. It was divided into three sections which were based on the three key variables of informational elements (nutritional elements, food labels and brand elements). The influence of the nutritional elements on purchase decisions was rated using a five point Likert scale. The ratings of the designed questionnaire ranged from 1 to 5 standing for either not influential to very influential or strongly disagree to strongly agree respectively. However, before the questionnaire was administered it was pilot tested to check on the flaws that could affect its efficiency and effectiveness. A few modifications were made to the questionnaire and the data were then collected. During data collection, respondents were asked to fill the questionnaire on their own whilst the researchers would wait to collect the filled questionnaire. The data collected were analysed using SPSS version 16.0. The data analysis software was used to run the Pearson Chi-square tests which were used to examine the

statistical relationships existing between dependent (purchase decisions) and independent (informational package elements) variables. The information obtained was then used to interpret and discuss results.

5 Results and discussions

The following discussion is based on results that were computed using Chi square tests.

Table 1: Chi square tests results for brand elements

	Brand name	Slogans	Logos	Symbols	Flavour
Pearson Chi-square	.006	.471	.220	.255	.233
Likelihood ratio	.023	.338	.164	.179	.302
Linear by linear association	.043	.275	.122	.008	.685
Hypothesis test Accept at $p > 0.05$	H_{1a} Accepted	H_{1b} Not accepted	H_{1c} Not accepted	H_{1d} Not accepted	H_{1e} Not accepted

The Pearson Chi-square tests were computed to establish the relationship between brand elements and students' purchase decisions of breakfast cereals. The results in Table 1 above show that the brand name is the only variable that has a significant relationship with university students' purchase decision as evidenced by the significance value (P-value = .006). It indicates that students are mindful of the breakfast cereals' brand name whenever they make purchase decisions demonstrating the power of the brand name. All other sub-variables, that is, slogans, logos, symbol and flavour, though important, are independently related to students' purchase decisions. The Pearson's Chi-square results show that university students do not necessarily consider them when purchasing breakfast cereals as indicated by the significance values (P = .471; .220; .255 and .233) respectively. This could be explained by the fact that in the consumers' memory link, a brand name is not merely a 'name' but rather a truncation of the various attributes embedded in it. Therefore we accept the hypothesis statement (H_{1a}) that the brand name has a significant impact on university students' purchase decision of breakfast cereals and do not accept all the other brand element sub-variables.

Table 2: Pearson Chi square tests for nutritional information

	Energy	Protein	Fat	Vitamin	Fibre	Calcium	Sugar
Pearson Chi-square	.002	.010	.546	.183	.422	.137	.048
Likelihood ratio	.005	.004	.462	.123	.282	.148	.129
Linear by linear association	.000	.035	.151	.031	.007	.052	.377
Hypothesis test Accept at $P > 0.05$	H_{2a} Accepted	H_{2b} Not accepted	H_{2c} Not accepted	H_{2d} Not accepted	H_{2e} Not accepted	H_{2f} Not accepted	H_{2g} Accepted

Table 2 above depicts the Pearson Chi-square results for nutritional information. It can be noted that energy (P = .002) and sugar (P = .048) are significantly related to university student's purchase decisions of breakfast cereals. This suggests that university students highly consider nutritional information on energy and sugar levels when purchasing breakfast cereals probably because learning by its nature requires significant amount of energy and sugar adds taste to the breakfast cereals. The other sub-variables that include protein, fat, vitamin, fibre and calcium appear to be secondary considerations as indicated by the significance values (P = .010; .546; .183; .422 and .137) respectively which entail that these sub-variables have a negligible influence on university students' purchase decisions of breakfast cereals. This could be due to the nature of the product which generally has high energy and sugar content thereby making other nutritional information elements such as fat, proteins, vitamins, calcium and fibre less significant. Therefore we accept the hypotheses statements (H_{2a} and H_{2g}) that nutritional information on both energy and sugar influence university students' purchase decision of breakfast cereals. Consequently, we do not accept the hypothesis statement that the other variables (fat, protein, vitamin, fibre and calcium) influence university students' purchase decisions of breakfast cereals.

Table 3: Pearson's Chi square tests results for food label information

	Use instructions	Expiry date	Weight	Ingredients	Storage
Pearson Chi-square	.005	.577	.032	.182	.460
Likelihood ratio	.587	.688	.061	.126	.393
Linear by linear association	.694	.683	.808	.116	.132
Hypothesis statement	H_{3a} Accepted	H_{3b} Not accepted	H_{3c} Not accepted	H_{3d} Not Accepted	H_{3e} Not Accepted

The Pearson Chi-square tests results for food label information in Table 3 above reveal that university students highly regard the use instructions when purchasing breakfast cereals as indicated by the significance value ($P = .005$) which denotes a significant relationship between use instructions and purchase decisions. This can be explained by the probable fact that the breakfast cereals require methodical preparation failure of which may result in a badly and poorly prepared meal which may be detrimental to one's health. The Pearson Chi-square test results concerning other sub-variables, that is expiry date ($P = .577$), weight ($P = .032$), ingredients ($P = .182$) and storage ($P = .460$) show that university students tend to disregard these variables when purchasing breakfast cereals. This could be attributed to the low involvement nature of the breakfast cereals as a product. Therefore we accept the hypothesis statement (H_{3a}) that use instructions significantly influence university students' purchase decision of breakfast cereals and do not accept that the other sub-variables, which include expiry date, weight, ingredients and storage conditions.

6 Managerial implications

The main thrust of this paper was to establish the relationship between informational package elements and purchase decision of breakfast cereals amongst university students. The research findings revealed that indeed, the brand name is a vital tool which product managers should continuously audit and effectively manage to ensure that it remains relevant to the target market. In essence, the brand name is the cornerstone of the product which by itself can trigger purchase intention therefore there is need for managers to build on brand assets and minimise liabilities to avoid brand dilution. It is also vitally important for product managers to give considerable attention to instructions of use as they are one of the key determinants of purchase decisions. In as much as other informational variables appear insignificant, it is prudent for managers to take cognisance of the fact that they play a complementary role in provoking purchase decision. They are powerful communication vehicles which may instigate consumer interest and/or impulsive purchase behaviour.

7 Further research

The domain of this study was university students of a selected institution; as such it may be necessary to conduct a comprehensive research which encompasses students from other institutions of higher learning. Moreso, the research focused on purchase decisions of breakfast cereals, and therefore it is against this milieu that we propose further studies on this question at a macrocosm standpoint so that a more decisive research could be conceded. It is noteworthy that consumer purchase decisions are not only dynamic but subtle in nature and it may be sensible to embark on continuous researches in order to ascertain the impact of informational package variables on a spectrum of other products.

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