

**UNDERSTANDING THE EFFECT OF BRANDING AND PACKAGING
DESIGN ON CHOICE PREFERENCE IN THE PURCHASE DECISION
OF FRESH MILK**

**A Research Report
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By

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30 November 2007

Declaration

I, Wayne Dirk van Biljon, declare that this research report is my own work.

It is being submitted for the degree of Master of Business Leadership to the University of South Africa.

It has not been submitted before for any degree or examination at this or any other University.

A handwritten signature in black ink, enclosed within a hand-drawn oval. The signature is stylized and appears to read 'Wayne Dirk van Biljon'.

Signed

Dedication

This work is dedicated to:

My loving wife,
Dominique

My mentor and friend,
Karl Kebert

My family,
Dirk, Shirley, Rachelle and Grant van Biljon,
Elisabeth and Michele Kebert
Jason Moriarty

Abstract

Brand and packaging design is an important factor in the choice preferences of the consumer when making a purchase decision on low involvement products such as pasteurized milk.

This research utilized a mixed-methodology design approach on understand consumer behavior toward brand and packaging design and how these elements affected the purchase decision.

Price sensitivity plays a prerequisite role in the consumer purchase decision and whilst most are willing to pay a price premium for brand and packaging design elements, limited income is a clear inhibitor. Brand awareness and trust plays an important role in quality perception followed by image as part of visual stimuli in choice preference.

The challenge for researchers is the understanding of the limitation of the consumers and then finding a balanced marketing mix for both price and brand to suit consumer expectation and aspiration.

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1 Chapter One: Orientation

This chapter provides an overview of the research report in order to orientate the reader as to the purpose and structure of the document.

1.1 *Introduction*

Understanding the behaviour of consumers who have limited access to income, and live in rural or urban informal settlements where infrastructure is limited, provides a unique challenge research.

This is a large consumer group making up as much as fifty percent of the country's population which in turns spends over fifty percent of their income levels on food stuffs. Often discarded as unimportant due to their limited income or exploited by offering them low cost substandard products, little effort is made in trying to understand the needs and expectations of these consumers. Yet, the importance of this group is underestimated and the choice preferences are expected to be no less unique than those found in other consumer groups.

As South Africa continues its transformation in respect of equality and upliftment of the poor, consumers in this group are becoming mobile in the emerging middle class movement. Understanding the behaviour of these consumers assists with offering the best product solutions and being a substantial size consumer group, suggests that a marketing strategy designed around this understanding can have far reaching effects.

Understanding how brand and packaging design is perceived by these consumers and the impact it may have on their decision to purchase a product is the underlying theme of this research report.

1.2 Purpose of this research

The research attempts to gain an understanding of the effect of brand and packaging design elements on choice preference of a target consumer group. The target group of consumers is those in Living Standards Measures one to four for which limited information was found. How the considerations of these preferences impacts on the purchase decision of the target consumer group is the main purpose of the study.

1.3 Problem statement and propositions

The problem statement for this research is as follows;

To obtain an understanding of the effect of branding and packaging design on choice preference in the purchase decision of pasteurized milk by consumers in Life Style Measure categories one through four.

This problem statement will be researched through the following propositions;

Proposition 1

Consumers in lower LSM categories consider price of a product as a prerequisite condition that needs to be satisfied before brand, including packaging design and brand awareness, is considered.

Proposition 2

Consumers in lower LSM categories consider brand awareness and visual stimuli as the most important elements of brand and packaging design in choice preference when making the purchase decision.

The report will further research set of underlying assumptions as listed;

- 1) Consumers would prefer the aesthetically pleasing design elements to the traditional elements as such;

- a. Consumers would prefer the white pigmented bottle to the clear bottle.
 - b. Consumers would prefer the wraparound label to an adhesive label.
- 2) Consumers would prefer photographic images above other image types and that colour use in design was an important factor.
- 3) Consumers would be willing to price premium for aesthetically pleasing packaging elements.

1.4 Definitions

Target consumers will be defined by Living Standard Measures as presented by Haupt (2006). This method of definition provides for living standards that are measured using a multivariate market segmentation index. This is a useful tool in the South African context and facilitates the division of the population group into homogeneous groups (Haupt, 2006).

1.5 Delimitations of the study

The delimitations are defined as the boundaries of the study and include the following;

- 1) The study is limited to the Gauteng Province of the Republic of South Africa.
- 2) The consumer group of focus of the study will be those in LSM categories one to four.
- 3) The study is focused in the Dairy Industry at a single market segment of pasteurized milk.

1.6 Importance of the study

The importance of this study is founded on the limited information available on consumer behaviour in lower income levels and class in South Africa. This

research attempts to obtain an understanding of the factors that contribute to the purchase decisions of these consumers.

1.7 Outline of the research report

The relevant theory and assumptions in respect of the report is housed Chapter Two's literature review. This followed by the research strategy and design in Chapter Three's research methodology. Chapter Four contains the results of the research report which is discussed and conclusions drawn in Chapter Five.

2 Chapter Two: Literature Review

The study will make use of packaged fresh milk, a commodity product in the Fast Moving Consumer Goods market, to obtain buyer behaviour information. Little is known of choice preferences in respect of consumers in Living Standards Categories 1 to 4 and how this impacts the purchase decision. The purpose of the study is to obtain an understanding into buyer preferences of this focus group of consumers.

This section of the study contains the literature review performed by the researcher. A literature review presents information required to give the user of the report an understanding of the background of the research report (Cooper and Schindler, 2001). The review contains the pertinent information that leads to the need for the study and the subsequent identification of the problem statement (Cooper and Schindler, 2001). The secondary data obtained from the literature review is presented below.

2.1 Brief Overview of the Dairy Industry

Milk and other dairy based products feature in the consumption behaviour of almost every South African consumer and is described by Bylund (2003) as one of the essential food components for man. According to Coetzee (1982), cited in van Wyk, Britz & Myburg (2002), milk is favoured highly in all southern African cultures and contains a variety of nutritional benefits for the consumer.

The first recordings of milk that was used as human food date back to 9000BC in the Middle East and evidence of cattle herds being kept and milk production practices date to 7000BC in Turkey (Bylund, 2003).

Domesticated cows were herded through much of Europe and Asia during the Age of Exploration, and these domestic breeds were introduced to many of the colonies. With the arrival and establishment of colonies by the Dutch

Settlers and the British Empire to southern Africa in the 1600's, many varieties of these domesticated cow breeds arrived and herds were established for milk production and consumption. The first record of a farmer making a living on production and sale of milk in South Africa dates back to 1656 (Dairy Marketing, 2007).

2.1.1 Types of Dairy Farming

In line with international trends, cow's milk is the most commonly consumed milk in South Africa with small segments existing for goats and sheep milk among others. Cow's milk production can be further segmented into domesticated breeds, several which are imported breeds introduced from the late 1800's to the southern Africa region.

According to Gertenbach (1992), Holstein-Friesland, Jersey, Ayrshire, Guernsey, Swiss-Brown and the Dairy Shorthorn are recognized as the six main types of dairy breeding cattle in South Africa. Holstein-Friesland is the favoured breed for dairy farming based on the animal's high milk yield, with Jersey milk the next favoured breed based on its high butterfat and protein content.

The different dairy cow breeds produce different milk composition and milk volume or yield. Milk composition is defined as the percentage butterfat and milk proteins that are found in the milk (Bylund, 2003). The milk yield and milk composition are important factors for dairy farmers when considering the viability of farming a breed of dairy cattle.

2.1.2 Challenges in the industry

The South African Dairy industry is currently faced with challenges that have an impact on the sustainability of milk supply and the price of the milk to the consumer.

Since 1994, with abolition of the Dairy Board in South Africa, milk producers (primary industry) can now produce and sell their own milk, on their own to milk processors (secondary industry) with prices based on supply and demand (Dairy Marketing, 2007). This industry is further characterised by an instability character due to the ecological differences between dairy farming regions and the cyclical demand for milk. Lower milk production in winter creates a shortage which then increases milk prices. The primary industry then produces more milk at the higher price and as a result supply may exceed demand creating surpluses and a subsequent decrease in the milk price. According to Makgetla (2007), price collusion is currently under investigation among the secondary industry players. These players have been accused of denying the primary industry increases to their selling prices for almost five years which had a dramatic effect on the dairy industry. This together with rising input costs, such as the high commodity prices for maize has reduced the profitability in dairy farming. Since 1997, the number of primary producers has reduced from 7000 to 4100 in 2006. (Makgetla, 2007) This dramatic drop in milk producers has exacerbated the milk shortage problem in South Africa, driving up input costs and riving up the milk price being paid by the consumer.

There is evidence that the milk shortage is a worldwide problem which is forcing up milk prices around the globe. Evans and Rossingh (2007) report that the greater demand for milk from China and Latin America and high maize prices, preventing farmers from increasing their herds, are contributing to the shortage. This is compounded by subsidies eliminating surpluses in Europe, slowed production in the USA and drought reducing Australia's ability to maintain exports. Growth in annual milk consumption has increased by 3% and the worlds milk producers have failed to match the demand.

The challenges faced by the local and international dairy industries has resulted in drastic price increases to the secondary industry which in turn has seen increases in price in dairy products to the consumer.

2.2 *Product categories*

The primary industry supplies milk to the secondary industry for conversion into a variety of dairy products. Bylund (2003) details the following categories that milk can be categorized into:

- 2.2.1 Pasteurised milk products which are liquid products made from milk and cream to be used directly by consumers. This group includes whole milk, skim milk, standardized milk and varieties of cream.
- 2.2.2 Long-life milk which is liquid products that are heat treated through a process known as sterilization. Such a product can be stored for long periods of time without refrigeration and can be distributed over long distances.
- 2.2.3 Cultured milk products which are liquid products made from milk and are prepared by a fermentation process using lactic acid and yeasts or combinations. The product is inoculated with a starter culture which converts lactose to lactic acid. This group includes yoghurt, kefir, buttermilk and sour milk.
- 2.2.4 Butter and dairy spreads which is a food in the form of an emulsion with the principle ingredients being water and/or milk and edible fats and oils.
- 2.2.5 Cheese which is the basic solids of milk, being proteins and fat, concentrated approximately to a ratio of ten to one. Cheese is manufactured by coagulating the raw materials through the action of rennet or other suitable agents and then draining away the whey resulting from such coagulation.
- 2.2.6 Condensed milk which is the method of preserving milk by sterilising evaporated milk in sealed containers.
- 2.2.7 Milk powder which is the method of preserving milk through a drying process.

2.2.8 Ice Cream is a milk based product produced by adding an emulsifier to milk and using a continuous freezing process to harden.

During 2006, approximately 2,4 billion litres of milk was produced by the primary industry. According to the Milk Producers Organization, representative body of the primary sector, only 30% of the total milk produced were processed into pasteurized milk. The other 70% is used across the other dairy categories detailed above. (Makgetla, 2007)

2.3 *Pasteurised milk products*

The processing of milk from raw milk into a pasteurized milk product is carried out by the secondary industry. Milk from the Holstein-Friesland herds is commonly used to be processed for direct consumer use. It is not uncommon for milk processed by the secondary industry to be a combination of milk collected from the variety of known breeds.

2.3.1 Nature of milk

Milk is a complex product and is made up of several principal components namely water, fat, proteins, lactose and minerals. Trace amounts of other substances such as enzymes, vitamins and pigments are also found (Bylund, 2003).

Cow's milk consists of approximately 87% water and 13% dry substance which is suspended or dissolved in the water. The average composition of cow's milk appears as follows;

Moisture	87,0%
Fat	4,0%
Proteins	3,5%
Lactose	4,7%
Trace	0,8%

Minimum standards are legislated in the Foodstuffs, Comsmetics and Disinfectants Act of 1972, the Health Act of 2003 and the Agricultural Products Standards Act of 1990 for each of these components (The Dairy Standards Agency, No Date). These components can also be altered through processes to produce different products in this milk group such as skim milk, low fat milk and whole milk within the accepted standards.

2.3.2 Producing pasteurized milk

Marshall (1987), as cited in van Wyk et al (2002), states that without refrigeration, raw milk will begin to ferment or sour within five to six hours of milking having taken place. Fresh milk from a healthy cow is almost completely free from bacteria and needs to be protected from contamination after it has left the udder (Bylund, 2003). Raw milk is thus immediately cooled to and stored at temperatures below four degrees Celsius to keep unavoidable contamination growth low.

The raw milk goes through stages of standardization, pasteurization and homogenization processes to produce end product pasteurised milk for direct consumption (Bylund, 2003)..

The process of standardization of milk is the practice of varying the butterfat content of the milk by "skimming" or removing the excess butterfat from the raw milk to common values. Raw milk butterfat content ranges between 3,8% and 4% and standardization would be used to produce low-fat milk which has a butterfat content of 1,5% or Full-cream milk with a butterfat content of 3,3%.

The shelf life of pasteurized milk is very dependent on the quality of the raw milk used and if of sufficient high quality should last for 8 to 10 days at temperatures between 5 and 7 degrees Celsius.

2.3.3 Quality

Microbiological standards have been legislated by the Department of Agriculture and the National Department of Agriculture as to the minimum requirements for milk to safeguard human consumption of the product. These standards include the maximum level bacteria counts that are permissible in milk before it becomes unfit for consumption. The Dairy Standards Agency of South Africa monitors, among others, the pasteurized milk category standards in South Africa (The Dairy Standards Agency, No date).

2.3.4 Pasteurized Milk Product groups

In South Africa, pasteurized milk products are produced and consumed in three common forms. Full-cream milk that has a minimum fat component of 3,3%, low-fat milk that has a minimum fat component of 1,5% and fat-free or skim milk that has a fat content of less than 0,5% are the most common place. The fat remaining after skimming or standardization is processed and sold as Fresh Cream. Whole milk or milk with fat levels above 3,3% are uncommon and niche market product.

Full cream milk is the largest of the group of the pasteurized milk products produced and consumed. There is evidence of a growing trend towards the use of low-fat and skim milk variants as South African consumers become more aware of their own personal health and well being, however despite this growth, these groups are significantly smaller than that of full-cream milk.

2.3.5 The market for pasteurized milk

Pasteurized milk is classified as a Fast Moving Consumer Goods (FMCG) market product and according to Silayoi and Speece (2004), FMCG products are more than often low involvement products. A pasteurized milk

product across a range of suppliers does not offer any differing characteristics or information differences between the products. There is thus little for a consumer to evaluate when making the purchase decision of pasteurized milk resulting in its low involvement classification. With over 250 dairy processors in South Africa (Makgetla, 2007), albeit that many of these processors are regional and not national, consumers can be presented with numerous brand choices when looking to purchase pasteurized milk. With little to differentiate by way of product characteristics and information, pasteurized milk products compete in two main areas, price and brand.

Pasteurized milk price offers a limited area where dairies can compete for consumer preference. Well established market brands in South Africa, in particular, the nationally distributed brands command a premium for their pasteurized milk. These larger processors have greater negotiating power with both suppliers and the retail and wholesale traders and leverage on this for premium pricing. Regional and other brands have more than often tedious negotiations with these same retailers and wholesalers and inevitably receive lower pricing levels. Despite this, input costs and raw materials in the pasteurized milk production are often comparable across all processors and it is the dairies that can optimize the economies of scale principle that can build higher margin into their products. There is often very little pricing difference between on-shelf pricing to consumers between brands.

This comparable pricing and lack of characteristics and information that can differentiate one product from the next, leaves the consumer with very little to evaluate when selecting a pasteurized milk product. Prendergast and Pitt (1996) suggest that packaging is one of the most important factors in the purchase decision at the point of sale and it is estimated that 73% of purchase decisions are made at the point of sale (Rettie and Brewer, 2000). With little else to differentiate the products the pack design becomes the "salesman on the shelf" (Pilditch, 1972 cited in Silayoi & Speece, 2004) at the point of sale for pasteurized milk. Packaging is a

primary vehicle for communicating and branding of products to consumers (Rettie and Brewer, 2000) and plays an important role in the branding strategy of FMCG products.

2.4 The Importance of branding and packaging design

Branding and packaging design plays an important role in influence the consumers purchase decision. These elements need to be considered in the marketing strategy and packaging design process for maximum results.

2.4.1 Marketing strategy

According to Bogart and Lehman (1973), products that are very similar rely on brand identity to create the perception or impression that they are in fact different and this is vital to competitive selling.

A primary marketing strategy over the last decade is the technique of promoting products that are identifiable by their brand name. A corporation name, manufacturer name or any random name attached to a product constitutes its brand name. The brand name comes to represent values and beliefs that are socially acceptable and “fit” with the lifestyle of the consumer (Danesi, 2006). This is no truer than in the dairy industry where companies promote values of caring, health and well being, love and happiness in attempt to appeal to the consumer at an emotional level.

Building strong brands is an important strategic element for any company. A well recognized brand can expedite the purchase decision of the consumer which in return reduces the time and efforts required to sell a product (Perrault and McCarthy, 2005). A strong brand can further improve the image of a corporation and expedite the acceptance of new products by the market in a brand extension strategy. A customer that has had a positive experience with a brand purchase is more likely to repurchase the

brand and thus likely to make positive association to brand extensions offered by the same corporation (Perrault and McCarthy, 2005)

However, with low involvement products and the lack of evaluation by the consumer, causing the inability of the consumer to distinguish between brands, results in a weak "habit" brand loyalty. Consumers that purchase a brand that meets their expectation have a tendency to remain "satisfied" with the brand, especially if they are constantly receive cues about the brand (Silayoi & Speece, 2004). Silayoi and Speece (2004) highlight findings in survey data from Thailand that packaging played an important role in reminding the consumer about the brand and helped to reinforce habit loyalty.

2.4.2 Packaging design

Multiple elements make up the concept of packaging design and include text, shape, graphic design, logo, size, colours, illustrations, material, construction, and texture (Underwood et al., 2001)

A good packaging design makes a product more easily identifiable and promotes the brand at point of sale, (Perrault and McCarthy, 2005) and the design of the pack itself may be incentive to buy the product (Hall, 1993).

Silayoi and Speece (2004) performed an exploratory study on the impact of involvement level and time pressure in packaging and purchasing decisions in FMCG in Thailand. Their study considered four main packaging elements which were separated into two categories; namely visual and informational elements. The visual category included the elements of graphics, colour, packaging size and shape. The informational category included product information and packaging technology. The study found that graphics and colour, shape and size and product information were the packaging elements most often identified. Silayoi and Speece (2004) concluded that visual elements of the package influence

the choice of product with graphics and colour being the major factor. Picture vividness was identified to have the most positive impact for products with lower levels of involvement.

In a low involvement situation, such as that of FMCG and thus pasteurized milk, the visual elements of graphics and colour, size and shape can thus be expected to positively influence consumer choice. (Silayoi and Speece, 2004).

2.5 *Visual elements of packaging design*

The visual elements of packaging design include three key areas namely, use of graphics, use of colour and the packaging design and shape.

2.5.1 Graphics

Graphics is defined as the visual stimuli that include elements such as logo, font appropriateness and pictures or illustrations used in packaging design. Each of these elements can contribute to product appeal to the consumer.

2.5.1.1 Logo

Danesi (2006) defines a logo as the pictorial comparative to a brand name. The term "logo" is derived from the Greek word *logotipos*. As an important element of the visual stimuli for any branding strategy, logos are designed as a signal mechanism for a product in a visual channel, which interconnects products with the daily life of consumers (Danesi, 2006). A visually appealing logo design, amongst other elements of a brand, enhance a products overall appeal to the consumer, thus contributing to the overall corporate image of the corporation.

Hertenstein, Platt and Brown (2001) found strong support for improved financial performance of a corporation where careful focus had been

placed on design effectiveness. Using 12 financial performance measures over 51 companies over a five year period, better financial performance was reported for corporations that place emphasis on design than those that did not. Although the results of the study support the emphasis of visually appealing identity, extended to the logo, there were major limitations in ascertaining the transferability of this finding to international markets. Albeit, Hertenstein, Platt and Brown (2001) propose expansive studies to be statistically significant, evidence to support similar findings in international markets and foreign countries would provide further guidance to corporation management.

Henderson & Cote (1998) researched 13 design characteristics over 195 logos to develop guidelines for selecting or modifying logos to achieve a corporation's image goals. Existing literature highlighted correct and false recognition, affect, meaning and subjective familiarity as the key elements of a good logo. A combination of literature and discussions around design characteristics yielded the 13 characteristics which were rated by sets of students from various universities across the United States. The experiment was carried out over three phases with the first two phases analyzing stimuli and the third phase analyzing influence of design dimensions. It was found that moderate to higher elaborateness of logo design ensures that it is more affectively pleasing. Simplifying of logos lowered affect and was advised against. Naturalness was shown to improve affect if not too excessive. Naturalness and harmony were elements shown to improve the recognition of a logo. Familiar meaning of a logo was enhanced by using a unique design of a familiar object and further enhanced by increasing the naturalness of the logo. Henderson & Cote (1998) suggested three different strategies for logo design being; High recognition logos, Low-investment logos and High-image logos. Finally, guidelines were provided that would enable a corporation to design its logo based on the goals of corporate image it wishes to achieve. The study was limited in that it did not make use of the company name as an element of the logo design. It did not test recall of

the logo and did not make use of colour as a design element, which are both important elements of a visual stimuli strategy.

Henderson et al (2003) found that the design of logos was done intuitively by designers and corporations. The study aimed to establish guidelines for designing visual stimuli for logos to be used in Asia to maximize brand strength. The study evaluated logos in China and Singapore and the same methodology and stimuli used in the 1998 study by Henderson and Cote. The goals for visual stimuli were again affect, familiar meaning and recognition. Feng Shui was added to the study as it had become a design element identified in Asian literature. Designers from Singapore and China were used to evaluate and ascertain design characteristics. Students from universities in China and Singapore were asked to rate logos on affect, meaning and recognition. Three underlying design dimensions were identified; elaborateness, harmony and natural. The results corresponded to those of the Henderson and Cote (1998) study and provided evidence that responses to design elements may be universal although they delimit that not enough countries have been studied to draw that conclusion just yet. Henderson et al (2003) suggest that visual stimuli will be an effective tool in Asian markets. Furthermore, Asians have a diverse range of languages and many, as with other developing countries, are not proficient in English and communication via logos and visual stimuli will play an important role for any corporation. Their research again delimited use of colour and effect of design on recall of logos.

2.5.1.2 Font

Doyle and Bottomly (2004) tested font appropriateness use in the visual equity of a brand or logo. The study highlighted that when brands were designed in an appropriate font they were selected twice as frequently as when not. A two-alternative forced-choice task was used over 10 different product categories. The study highlights the importance of font

appropriateness as an element of visual stimuli when used in a company or brand name.

2.5.1.3 Pictures and illustrations

Underwood et al. (2001) examined the attentional effects of incorporating a picture or illustration of the product on the packaging of the product. The study found evidence to support that package pictures can gain attention for the brand in the store. The use of pictures was successful in gaining attention to low familiarity brands and suggests an important role for pictures on packages.

For low involvement products, image building can have an impact on consumer decision making. For low involvement products, the packaging is the product, (Silayoi and Speece, 2004) and a package that attracts the consumer's attention can expedite the decision making process and result in a purchase. In low involvement decisions, graphics and colour become critical elements in catching the consumer's attention. (Grossman and Wisenblit, 1999).

Ekuan et al. (2001) detail how an illustration in the form of a "Thumbs Up" image was used on a local cola brand in India, facilitating the bridging over the low literacy levels, approximately 50 languages and in excess of 400 dialects. Coke took over Thumbs Up and immediately discontinued the local product, pushing its own brand onto the consumers who subsequently rejected the brand. Coke was forced to re-launch Thumbs Up to prevent erosion of their share of the cola market in India. The strong visual equity of the Thumbs Up brand appears to be the conclusive factor and thus emphasizes the importance of imagery in packaging and brand design as a strategy to overcome illiteracy, language and dialect.

Erdelyi and Becker (1974) provided strong support that visual stimuli was learned faster than verbal stimuli and was thus a more effective method

for improving recall. The use of pictures and illustration is more easily recalled than when words are used. Subjects in the study took three tests which comprised pictures and words and across the tests, the results identified that the ability to recall pictures improved whereas the recall ability of words remained constant. This improving recall ability was termed hypermnesia and would support the findings by Saliyoi and Speece (2004) in that this improvement in recall would increase the probability of loyalty to a brand and as long as the product remained constantly available, the consumer would have little reason to switch brands.

A study done by Madigan and Lawrence (1980) tested factors that affect hypermnesia in free recall by varying the quality of pictures that was presented to subjects. Subjects were tested in a similar manner designed by Erdelyi and Becker (1974) but with the pictures presented in the sample being altered into first, picture as a word e.g. spade, then an outline drawing of the spade and finally a full colour image of the spade. At each stage, recall improved with the improved quality of the picture. Picture vividness has also been highlighted as a key factor for having positive impact for products with lower involvement levels by Saliyoi and Speece (2004).

2.5.2 Colour

Colour selection is one of the components of packaging and brand design that further enhances visual stimuli. It has been identified as an important tool to create and sustain brand and corporate images in customers' minds.

As found in a study done by Madigan and Lawrence (1980), addition of colour to pictures presented to subjects improved hypermnesia. Improving the quality of the picture presented and adding colour over a series of recall tests identified that these additions improved recall of images presented.

In a study conducted by Madden et al (2000), the meanings and preferences associated with an assortment of colours was studied in eight different countries. Respondents from each country evaluated ten colours selected from colours cited most often in previous literature. The subjects were then asked to rate the colours on scales designed to capture the meanings associated with each colour and then rate each colour in terms of which they liked most. The results highlighted a consumer preference for the colour blue across five of the eight countries with the remaining three countries rating blue in second place. White featured consistently as a highly preferred colour across all eight countries.

The study found a consistent pattern of colour clusters across a two dimensional perceptual map for the countries involved in the study. Blue, green and white were found to be a distinct cluster and the colours associated with meanings of "peaceful", "gentle" and "calming". Black and brown was another distinct cluster to one end of the map away from the other colours. These colours tend to have strongly held associations of "sad" and "stale". Red tended to stand alone in terms of colour and was consistently associated across all eight countries with "active", "hot" and "vibrant".

Madden et al (2000) found that their results indicate that consumers are similar in their liking of colour and colour meaning in many parts of the world. As colours have specific meanings associated to them, colours are important image cues and can become strongly associated with different brands. The colour red is associated with Coca-Cola. Yellow would be associated with MTN in a South African perspective. Madden et al (2000) go on further to state that transferring a package design across markets should be avoided without a thorough understanding of how colour is perceived in each market.

In the pasteurized milk market, colour plays an important role in product identification. Based on the three main product groups, Full-cream, low-fat and fat-free milk, colour is used to differentiate these groups and make the

packaging more identifiable to the consumer. It is accepted by the market for pasteurized milk that a blue bottle cap and/or a blue band on the packaging design communicates the full-cream milk variant to the consumer. Red is the accepted colour for low-fat milk and green is the accepted colour for fat-free or skim milk. Not all suppliers conform to these colour choices but it is accepted that the majority do. The simple use of this colour coding improves the logistics of milk handling and reduces confusion for the consumer and retailers.

2.5.3 Packaging size and shape

Saliyoi and Speece (2004) found that packaging shape and size has an impact on a consumers purchasing decision. It was identified that consumers are attracted to a product that is convenient to use and carry. It was further highlighted that a bigger package size is more noticeable and may be perceived by the consumer to suggest better value. Packaging shape can enhance the aesthetic appeal of a product, however it is noteworthy that preference for shape will vary between adults and children (Saliyoi and Speece, 2004)

2.6 Country Demographic Profile

In South Africa, low literacy, 11 official languages and various dialects poses challenges to marketers when marketing strategies are crafted. According to estimates presented by Statistics South Africa (2006) the country has a population of 47,4 million people. This estimation indicates a 16,7% growth in population when compared to the census of 1996 where the population total was 40,6 million. 79,5% of the population estimate in 2006 is made up by the African population group.

2.6.1 Literacy

Low literacy levels affect a large portion of the South African population. Literature discusses two levels of illiteracy namely functional illiteracy and

total illiteracy. Aitchison (2001) defines functional literacy as having the basic life skills needed for effective functioning in society i.e. the workplace. This would include varying degrees of language proficiency with emphasis on languages used in the workplace. An adult, no younger than 15 years old and who has had formal education no higher than grade 9 or standard 7, would be classified as functionally illiterate. Total illiteracy is defined as those adults no younger than 15 years old that have had no formal schooling whatsoever.

Rule (2003) states that "the high rate of functional illiteracy among South African adults is the legacy of apartheid and the deliberate policy of inferior educational provision for black people."

Both, Aitchison (2002) and Rule (2003) refer to statistical sources to analyze the trends. According to the 1995 October Household Survey, 46% percent of the total number of adults have less than grade 9 or standard 7 education. 11% of all adults have no schooling whatsoever. The 1996 General Population Census shows a more dire position. Of the total number of adults, 50% have less than grade nine or standard 7 education. 16% of all adults have no schooling whatsoever. Rule (2003) goes on to highlight that after reviewing these statistics, and despite government's efforts to rectify the problem, no improvement has been shown in adult education levels. A further point highlighted by Rule (2003) is that 16% of children between the age of 6 and 14 are not in school. If this is allowed to remain as such, these children will grow into adults and increase the adults group that is totally illiterate.

The studies by Rule (2003) and Aitchison (2002) both set out to evaluate the performance of Adult Basic Education Training in the country. Rule (2003) highlights the poor improvement in adult literacy and that the importance of Adult Basic Education Training is a responsibility that the government of South Africa needs to fulfill and which can improve personal and social development in the country. It is highly realistic that low levels of

illiteracy will remain a significant problem for the country and will not be easily rectified in the short and medium term future.

2.6.2 Income profile

Salmon, Njobe and Biggs (2005) present results indicate that 50,5% of the country's consumers are classified in LSM categories one to four. This group of consumers spends in excess of fifty percent of its disposable income of foodstuff. Whilst Living Standard Measures is not an income indicator (Haupt, 2006), income levels are directly correlated with LSM categories.

Consumers in these LSM categories one and two are characterized as those living in rural areas, in traditional mud hut dwellings with little to no access to basic amenities such as electricity and water. The monthly income levels range from R0 to R1,500 per month (Salmon, Njobe and Biggs, 2005).

Consumers in categories three and four are characterized as those living in new urban areas in the form of informal of squatter camps with dwellings that are matchbox in nature. Increased levels of access to basic amenities such as electricity and water are present and the monthly income levels range from R1,500 to R2,500 per month (Salmon, Njobe and Biggs, 2005).

There is evidence that this group is mobilizing and moving towards LSM categories five and upward creating an emerging black middle class.

2.6.3 Legislation and ethics

Understanding the country specific demographic make-up and the implied challenges thereof is crucial to a corporation in the selection and design of its logo, packaging, signage and so on. Failure to design a strategy that

includes illiterate consumers can result in the exclusion of sizeable portions of the market. These illiterate consumers are susceptible to misunderstanding the message a corporation tries to convey through its marketing strategy. As an example in South Africa, packaging design for food and beverage products is regulated by the Department of Agriculture and Department of Health. A fruit juice beverage manufactured for the local market must adhere to regulations that govern what design elements may or may not be used. A 100% fruit juice content variant may depict pictorial images of the actual fruits that have been used to manufacture the product. This then portrays a simple message to an illiterate consumer of what they are buying. A fruit drink variant in contrast, has less than 6% fruit juice content, and would contain added sugar and water. It is inherently more cost effective to produce than a 100% fruit juice content variant. Regulations restrict the use of any images depicting fruit on the packaging to prevent an illiterate consumer confusing the product for a 100% variant and purchasing on the basis of price alone. (Republic of South Africa, Department of Agriculture, 1990)

With a market that has low levels of literacy, many languages and dialects, there is the further challenge of ethical marketing to these consumers. The acceptable standards of marketing in developed countries may not be acceptable to those consumers in developing or less industrialized countries.

In 1970, Nestle made the mistake of not obtaining local intelligence before supplying their infant formula product into Third World countries (Post, 1986). The company had not factored in that the mothers in these third world countries had little to no literacy levels and that they could not read mixing instructions on the package. Mothers ended up "stretching" product that should what should have lasted only fives days were used over a ten day period resulting in their children suffering malnutrition and being starved. Other ethical dilemmas, such as quality of the water being used further compounded their problem. What should have been a positive initiative into these developing markets turned out to be a marketing

nightmare for Nestle, who were branded “Baby killers”. Apart from the lessons learnt by Nestle and the infant formula industry as a whole, the question should be asked; if corporate behaviour is an important element of the overall corporate image (Van Heerden and Puth, 1995), then surely the mothers who were unwittingly starving their children would not see Nestle’s behaviour as a positive act? This then lowers the overall corporate image of the company and the logo as an important visual signal would conjure negative perceptions by the consumers, being the mothers. This negative perception then extends to any product extension that carries a Nestle logo as the consumer believes it is a brand they cannot trust based on previous experience. Overlooking local challenges can have detrimental ethical and bottom line impact if not considered carefully by the corporation.

Another important consideration for the corporation in developing its image is the poverty levels in third world and developing countries. A corporation must show care in not being seen to target the social plight of consumers who are illiterate and have little to no earnings on which to survive. Brenkert (1998) discusses issues of alcohol marketing to inner city blacks in the United States where the PowerMaster liquor brand was positioned to draw on themes of power and boldness. Brenkert (1998) suggests “a person would be cognitively vulnerable if he or she lacked certain levels of ability to cognitively process information or to be aware that certain information was being withheld or manipulated in deceptive ways.” Targeting consumers who have low levels of literacy in marketing campaigns again poses an ethical dilemma that a corporation must consider in designing its strategy into these international markets. Consumers in South Africa are again susceptible to these marketing practices. Alcoholism is rife in South Africa’s townships and alcohol serves the social plight of many of the consumers who live below “breadline” levels. Targeting this social plight again raises questions over corporate behaviour that extends into corporate image. A logo as a visual signal would no doubt serve as useful marketing tool in brand extensions to these consumers but the ethical dilemma must be considered by the corporation.

2.7 Purpose of the research

The purpose of this research is to obtain and understand the effect of branding and packaging design on choice preference in the purchase decision of pasteurized milk by consumers in Life Style Measure categories one through four.

2.8 Conclusion

The literature review provides the theoretical foundation for the study and provides an overall background into the dairy industry, information on brand and packaging design and the consumer demographic profile. The findings of the study will be compared to literature reviewed in the discussion section in chapter five.

3 Chapter Three: Research methodology

Research design refers to the overall strategy that will be employed to solve a research problem. The design provides the overall structure for the procedures that will be followed, the data that is collected and the analysis that is carried out on this data (Leedy and Ormrod, 2005).

This chapter sets out the planning and design of the processes that will be required to collect and collate the data and extract information that will provide insight into the overall problem statement.

3.1 *The Problem Statement and Propositions*

Cooper and Schindler (2001) define the problem statement as a management question that represents a problem which is followed by a more detailed set of objectives.

3.1.1 The Problem Statement

The purpose of this research is to obtain an understanding of the effect of branding and packaging design on choice preference in the purchase decision of pasteurized milk by consumers in Life Style Measure categories one through four.

Propositions to be tested in the study were derived from the problem statement. A proposition is a statement of concepts that refers to observable phenomena which can then be tested (Cooper and Schindler, 2001).

3.1.1.1 Proposition 1

As highlighted in the literature review in Chapter 3, pasteurized milk products compete in two main areas being price and brand. Whilst pricing differences between brands are very small, dairies use branding as their main strategy for

differentiation. Products in the pasteurized milk market segment use brand and packaging design in an attempt to command a price premium from consumers.

Whilst literature advocates that the packaging design is a major factor when selling products with little to no differentiating characteristics (Silayoi and Speece, 2004), consumers from lower LSM categories would still consider pricing as a limitation at the purchase decision. Lower levels of income limit the consumer from basing their purchase decision on brand element alone and product price becomes a primary consideration, hereafter referred to as the qualifying dimension. As such, the following proposition has been formulated;

Before
proposition

Proposition 1

Consumers in lower LSM categories consider ^{affordability} (price) of a product as a prerequisite condition that needs to be satisfied before brand, including packaging design and brand awareness, is considered.

3.1.1.2 Proposition 2

Proposition 1 is set as the qualifying dimension that needs to be satisfied by a product in order to create a situation where the consumer can consider a purchase decision. Once this qualifying dimension has been satisfied, consumers will then be in a position to consider brand and packaging design elements, hereafter referred to as ~~the~~ determinant dimensions. Brand awareness is associated by the consumer with the element of trust in the quality of the product. The quality of the product is important to the consumer and failure of product quality minimum standards can be costly to a household with limited disposable income. Trust in quality through brand awareness of product is a major determinant dimension for the consumer. As such, the following proposition has been formulated;

Literature

Proposition 2

Consumers in lower LSM categories consider brand awareness and visual stimuli as the most important elements of brand and packaging design in choice preference when making the purchase decision.

3.1.2 Summary

This study proposes to establish buyer preferences of consumers in LSM categories 1 to 4 taking into consideration the lower levels of disposable income available to these consumers. Whilst marketing literature advocates strategies for branding to consumers to positively influence their choice, it is proposed that consumers at this level have qualifying dimensions for products, i.e. price affordability before determinant dimensions become part of the choice decision.

3.2 Research strategy

The research strategy comprises three phases with a mixed-methodology design approach being used. This approach includes the use of qualitative and quantitative methods to obtain data and information that can provide insight into the research question. Data collected using a mixed-methodology design approach uses complementary data-gathering activities and can aid in overcoming weaknesses in individual data collection tactics (Lee, 1999). Descriptively rich and quantitatively meaningful data is thought to be the product of a mixed-methodology design approach (Lee, 1999).

Phase one involves the obtaining of the understanding of the background literature in respect of pasteurized milk and the components of branding and packaging design involved. This phase included qualitative procedures in the form of interviews and test samples to assist in establishing the relevant data that needs to be collected.

Phase two involved the developing of a survey questionnaire and electronic presentation of the questionnaire for data collection purposes. These mechanisms were subsequently tested in a pilot study and refined before being used for the data collection being sought in the survey.

Phase three moves on to the carrying out of the survey and covers the methodology used in the sample selection, data collection approach and the measurement instruments to be used. This phase further addresses the methods that will be employed for preparing and analysing the data collected and determining the reliability and validity thereof.

3.2.1 Phase 1

At this phase, a comprehensive search was done for literature that provided information pertinent to the study. Academic publications, periodicals, electronic media and databases, industry reports and presentations were searched for information with the following themes;

- 1) Packaging mediums inclusive of design aspects such as branding, use of colour, images, logos etc.
- 2) Dairy industry information, trends and analysis.
- 3) Consumer demographics, characteristics and behavioural trends.

Of the literature available, limited information was found that was specifically relevant in a South African context required for the study. Much international information was found and where relevant, inferences were drawn by the researcher to establish an understanding of the factors pertinent to the objectives of the study.

Thereafter, a two-stage qualitative approach was used to obtain information regarding the effect of branding and packaging design on consumer choices. Twelve 2-Litre bottles of milk available to the general consumer in the Gauteng region were obtained and the various components of the bottle considered.

Stage One

At stage one, an interview was held with Mr Atholl Campbell, who has over 25 years experience in the Food and Beverage industry, over ten of those years specifically in the dairy industry. He previously held the position of sales and marketing manager for Clover Dairy and currently holds that position for Montic Dairy.

During the interview, several key components of a 2-Litre milk bottle were discussed and are detailed as follows;

- The Packaging Medium – the actual bottle being used i.e. clear versus white pigmented;
- The Label Type – an adhesive label versus a sleeve or wraparound label;
- The Label design in respect of two components;
 - o Use of colour
 - o Use of images – Illustrations versus photographic quality images.
- Price sensitivity of the consumer

Having discussed each component in detail having considered the reviewed literature and the experience of Campbell, several key assumptions were arrived at. These assumptions were based on market experience and perceptions of consumer behaviour in a South African context, summarised as follows;

- 4) Consumers would prefer the aesthetically pleasing design elements to the traditional elements and as such;
 - a. Consumers would prefer the white pigmented bottle to the clear bottle.
 - b. Consumers would prefer the wraparound label to an adhesive label.
- 5) Consumers would prefer photographic images above other image types and that colour use in design was an important factor.
- 6) Consumers would be willing to price premium for aesthetically pleasing packaging elements.

Stage Two

During stage two, the assumptions arrived at in stage one was tested using a simple qualitative approach interaction with a sample of convenience candidates. Convenience sampling is useful in early stages of exploratory research as a method of testing or gaining ideas in respect of a problem being researched (Cooper and Schindler, 2001).

The Life Style Measure categories were assumed and not limited to any particular segments. Six sample groups were interviewed containing between one and three candidates and totalling nine candidates overall.

The candidates were shown eight of the original twelve 2-Litre bottles obtained. Four were excluded on the basis that they were the leading and most recognizable brands in the region. Of the eight bottles included, two were white pigmented bottles with wraparound labels, one was clear with a wraparound label and the remaining five were all clear bottles with sticker labels.

The candidates were asked to make a choice of a bottle they would purchase and what they considered when they had made their decisions. The question was asked in two rounds, the first sample including eight bottles, the second sample having had the white pigmented bottles removed. These results were noted over the two rounds and compared to the assumptions made in stage one in order to substantiate the assumptions made.

It is pertinent to note that the bottles shown to the respondents were empty and the fact that they did not contain milk appeared to create substantial differentiation between the clear bottles and pigmented bottles. This was noted for adjustment in phase two.

The comparison of stage one's assumptions with the results of stage two were considered against literature reviewed. From this comparison a formal set of questions was derived for use in a survey approach.

3.2.2 Phase 2

The 2-Litre milk bottle sample was defined and increased to ten bottles for use in the survey.

[A survey type questionnaire was designed in order to collect empirical data. The questionnaire was divided into two parts, part one being general information questions to establish the LSM category of the respondents and part two being questions relating to components of the milk bottles.]

[Part two of the questionnaire was designed to include an initial overarching question relating to the milk bottles and then further divided into subsets of questions that related to the individual components of the bottle.]

[An electronic presentation was designed using Microsoft PowerPoint and each question presented in the questionnaire was supported by a corresponding presentation slide. Visual stimuli by way of pictures and graphics were used to overcome potential problems of language and illiteracy of the respondents.

A sample group of three respondents was used in a pilot test making use of the questionnaire and the presentation. The researcher facilitated the pilot test and note was taken of time considerations, instructions on the questionnaire that were not clear and the queries made by the respondents albeit that no major adjustments to the actual questions was required

Post pilot test adjustments were made to the instructions on the questionnaire and certain slides in the electronic presentation. Despite the use of high resolution images of the sample of milk bottles selected in the presentation, it was decided to increase the visual stimuli by incorporating the use of the actual physical milk bottle samples.

3.2.3 Phase 3

During phase one, the various elements of two litre full cream milk products were assessed against prevailing literature, market experience and a qualitative tests. Phase one identified key components relevant to the packaging and branding of the milk product and how respondents assess these components when making the purchase decisions.

These elements were tested during phase two through a pilot test making use of a small sample of respondents. These respondents completed the survey, providing an opportunity for the researcher to rectify and improve the survey before moving onto final data collection.

A facilitator for the survey process was identified by the researcher as being required to overcome language barriers. The facilitator identified was previously a social worker in the local communities and proficient in several languages. She has previous experience in conducting surveys in HIV/Aids studies undertaken in the local communities.

An assistant was also chosen to assist the researcher and the facilitator with a particular focus on assisting with language barriers that were expected to be encountered during the survey process. Both the facilitator and the assistant were remunerated for their roles played in the survey process.

3.2.3.1 Sample

A non-probability method for selecting the sample for the survey was obtained through convenience sampling.

Three local communities to that of the researcher were identified as areas where individuals and households would typically fall into LSM categories 1 to 4, the required category of respondents for the study. A judgemental approach was taken as to the communities that would satisfy the criteria of the survey.

Diamantopoulos and Schlegelmilch (2000) define judgemental sampling as the scenario where the sample members are chosen on the researcher's judgement as what a representative sample should constitute.

While the communities chosen for the sample were based on convenience and the judgement of the researcher as to their suitability to the research criteria, individual sample members were chosen randomly.

The communities of the Magagula Heights, Kanane and Tamboekiesfontien area on the East Rand of Johannesburg were chosen for finding respondent for the survey. The target respondents in these communities are assessed as those in Life Style Measure categories 1 to 4 where disposable income is low and adequate housing and amenities are lacking.

Of the communities chosen, the Magagula Heights community have municipal electricity and water connections and each property stand has a flushing toilet in the form of an "outhouse" or separate building on the premises. Residents are responsible for erecting their own housing which in the majority of instances takes the form of shacks.

The community of Khanana have municipal electricity connections but no municipal water connection. The majority of housing erected is in the form of shacks.

Tamboekiesfontein had no connection to municipal electricity or water infrastructure. Residents live in rural huts and shacks with their main water supply coming from a communal borehole.

The township of Zonkiszwe is no more than five kilometres away from these communities and has complete infrastructure including, water, electricity, sewerage and roads. RDP housing projects have been undertaken in this area with shacks still a common form of housing.

As these communities are large in members, population parameters were included in order to obtain a population sample that would provide meaningful input to the study. The two parameters applied are as follows;

- 1) Respondents were asked to take part in the survey provided they were responsible for buying the groceries for the household. This parameter was applied to ensure that those of the household who made the purchase decision were included.
- 2) Respondents were only invited to take part in the survey if they were eighteen years and older. This parameter was applied to ensure the sample included adults who actually could or did make the purchase decisions for their households.

Respondents could be male or female and were only limited by the parameters as noted above. Respondent's age was controlled by requesting identification numbers of each respondent taking part in the survey and logged on a participation register.

Each respondent to have taken part in the process was given a free two litre bottle of milk or maas on completion of the survey questionnaire. It is pertinent to note that respondents were not informed of this at the outset to avoid tainting the random selection process.

3.2.3.2 Data Collection

Respondents for the sample were obtained by extending a written invitation to the community members. These invitations were distributed by the facilitator and the assistant over a five day period to random community members.

Data was collected using a questionnaire consisting of thirty-nine questions divided into seven sections. The questions were predominantly dichotomy scaling formats and determinant choice scales. These measurements will be dealt with in 4.2.3.3 below. Section one of the questionnaires made provision

for collection of data in respect of Life Style Measure categories. Section two through seven of the question was designed to collect data in respect of purchase habits and considerations of the respondents.)

(The questionnaire was designed to be no longer than four pages in length with an estimated completion time of thirty minutes by the respondents. A covering page was included which obtained information and guidelines to completing the questionnaire. Terminology used in the questionnaire was kept at a Basic English level to minimise confusion and lack of understanding by the respondents who were presumed to not have English as their first language.

An electronically presented PowerPoint presentation was used in conjunction with the questionnaire the respondents were required to complete. The visual stimuli orientated presentation was designed to further assist the overcoming of possible language and illiteracy barriers. The presentation is annexed hereto as Annexure A.

(The questionnaire and electronic presentation followed a systematic flow with each question in the questionnaire having a corresponding visual aid. Images were used in the electronic presentation do provide a visual reference to the questions being posed.)

The facilitator and assistant provided support to the respondents to clarify questions that were not understood.

3.2.3.3 Measurement instrument

Checklist scaling formats were used for the collection of general information from the respondents. Several options were provided in respect of Life Style Measure categories where respondents could chose of up to four responses. An example of such a question is question 2;

"What level of schooling have you completed?" with the possible answer provided being;

- 1) No Schooling;
- 2) Grade 1 to 9 / Standard 7;
- 3) Grade 10 to 12 / Standard 12 or Matric;
- 4) Post Matric studies."

Checklist scaling formats were selected to provide a method of obtaining demographic information in respect of the population. These checklists were designed using a selection Life Style Measure categories as developed by the South African Advertising Research Foundation (Haupt, 2006).

Use of two measurement scaling formats was made for the collection of data relative to the various elements and components of the two litre milk bottles.

The first measurement instrument used in this section of questionnaire was predominantly a Dichotomy scaling format. Questions were orientated round responses that predominantly took the form of "Yes/No" scales. An example of such a question is question 13;

"Is it important for you to be able to see the milk in the bottle?" with the possible answer provided being;
"Yes or No"

The second measurement instrument used was a determinant choice scale where respondents could chose one of several options provided for in a question.

"Which label has the picture you like the most?" with the possible answer being any one of the ten options provided.

The questionnaire used in the data collection is annexed hereto as Annexure B.

3.2.3.4 Reliability and validity

Prior to data collation and analysis, each completed questionnaire was reviewed to ascertain whether the respondents had performed their response selections inline with the guidelines. Ambiguous and non-responses were noted for exclusion from the data analysis process.

Where a respondent had failed to satisfactorily complete seventy-five percent or less of the responses in the questionnaire, provision was made to exclude the entire questionnaire from the data set.

The split-half technique was used as the final assessment of the data collated before analysis was undertaken. The technique assesses the internal consistency or homogeneity of the data

3.2.3.5 Data analysis

Unstructured data or data that has not been analysed contains little informational value (Diamantopoulos and Schlegelmilch, 2000). As such, a process of extraction and organization of the data contained in the questionnaire was undertaken.

Each response to questions in the questionnaire was designed to have a numerical representation. These responses were systematically transferred from the questionnaire and collated making use of a data matrix. Microsoft Excel software was used to house the data set and SPSS was used for frequency table calculations and graphical representations.

Most of the data collected was classified as nominal data as the numbers to represent each response have no mathematical responses and serve only as labels for classification (Diamantopoulos and Schlegelmilch, 2000). Nominal measurement allows for the dividing of data into discrete categories that can then be compared with each other (Leedy and Ormrod, 2005).

Once the data collation had been completed, use of frequency table calculations was made to analyze the data. Few statistics are appropriate for the analyzing nominal data (Leedy and Ormrod, 2005) and as hypotheses testing was not undertaken by the researcher, descriptive techniques were not used.

3.3 Conclusion

This chapter discussed the strategy and methods used in this research. The chapter provides the justification for the use of a mixed method approach in the design for data collection. The appropriate analysis methods are discussed and the statistical analysis of the data is presented in the chapter 5.

4 Chapter Four: Research Results

The study aims to gain an understanding of the choice preference of lower LSM consumers for which little academic information was found within a South African context.

The questionnaire presented to respondents was divided into seven sections with section one designed to collect demographic information about the population. The remaining six sections were designed to collect information related to design and packaging elements and consumer behaviour.

✓ The sample population was made up of 103 completed questionnaires where seventy-five percent or more of the questions posed resulted in acceptable responses. The data set collated in a data matrix was then analysed and the results thereof are presented and discussed. ✓

4.1 Section 1: Demographic information

Questions one through eight of the questionnaire were designed to collect data in respect of the demographic profile of the population.

4.1.1 Gender

Respondents

Question 1 sought to obtain a gender breakdown of the population between male and female. Despite changing social circumstances and trends in that more women are entering the workforce, it was expected that women would still carry responsibility for the purchasing of household groceries.

It is noted that as a prerequisite to partake in the study, respondents were screened to ensure that they were to some degree responsible for the purchase of groceries. This was done to ensure that the data obtained had

meaningful input from respondents who actually made the purchase decision for the household.

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	26	25.2	25.2	25.2
	Female	77	74.8	74.8	100.0
	Total	103	100.0	100.0	



Table 4-1 Gender

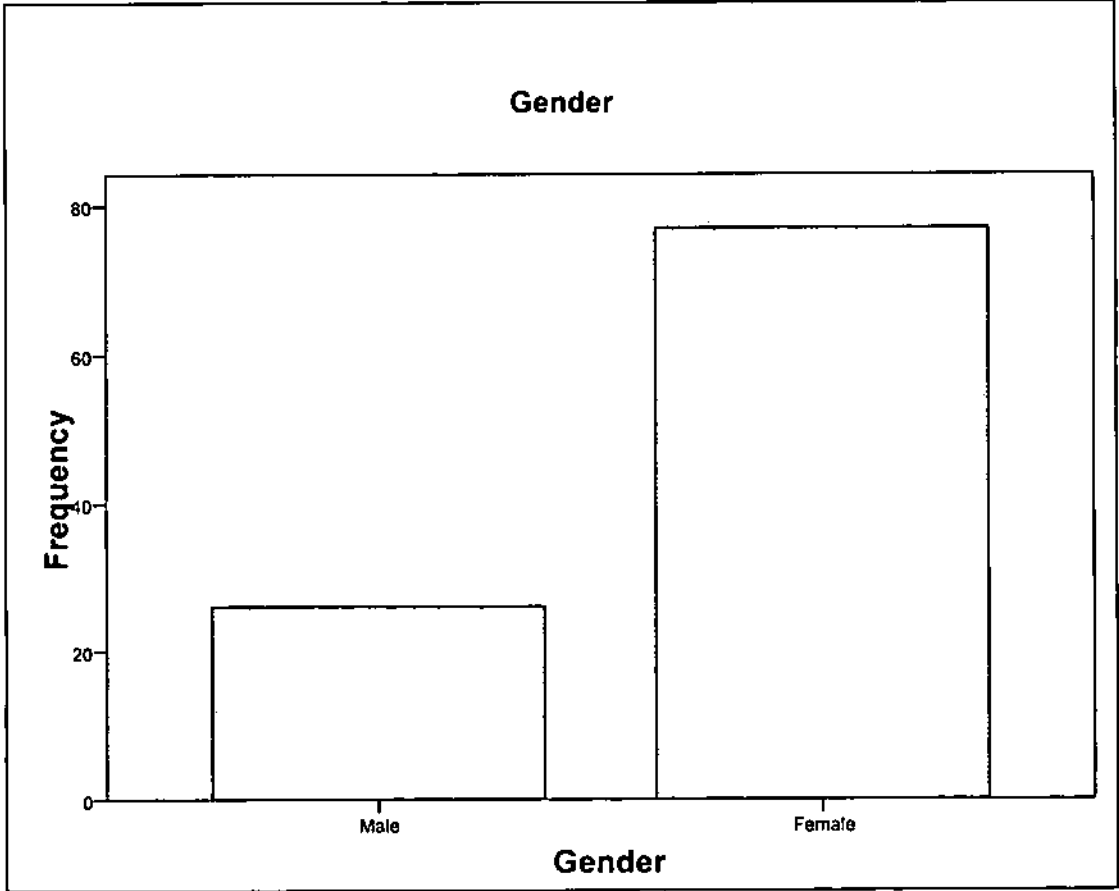


Figure 4-1 Gender

The response rate for the questions was one hundred percent and thus without error. Table 4-1 and Figure 4-1 details the breakdown of the responses and highlights that in the majority of instances the females of the household are responsible for purchasing groceries and thus the milk for the household.

4.1.2 Educational attainment

Respondents were asked what level of schooling they have completed at the time of taking the survey. Respondents were given four categories from which to select which ranged from no formal schooling to post Grade 12 (Matric) studies. The results are detailed in Table 4-2 and Figure 4-2 below.

Education		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No schooling	16	15.5	16.0	16.0
	Grade 1 to 9	41	39.8	41.0	57.0
	Grade 10 to 12 / Matric	39	37.9	39.0	96.0
	Post Matric Studies	4	3.9	4.0	100.0
	Total	100	97.1	100.0	
Missing	System	3	2.9		
Total		103	100.0		

Table 4-2 Education

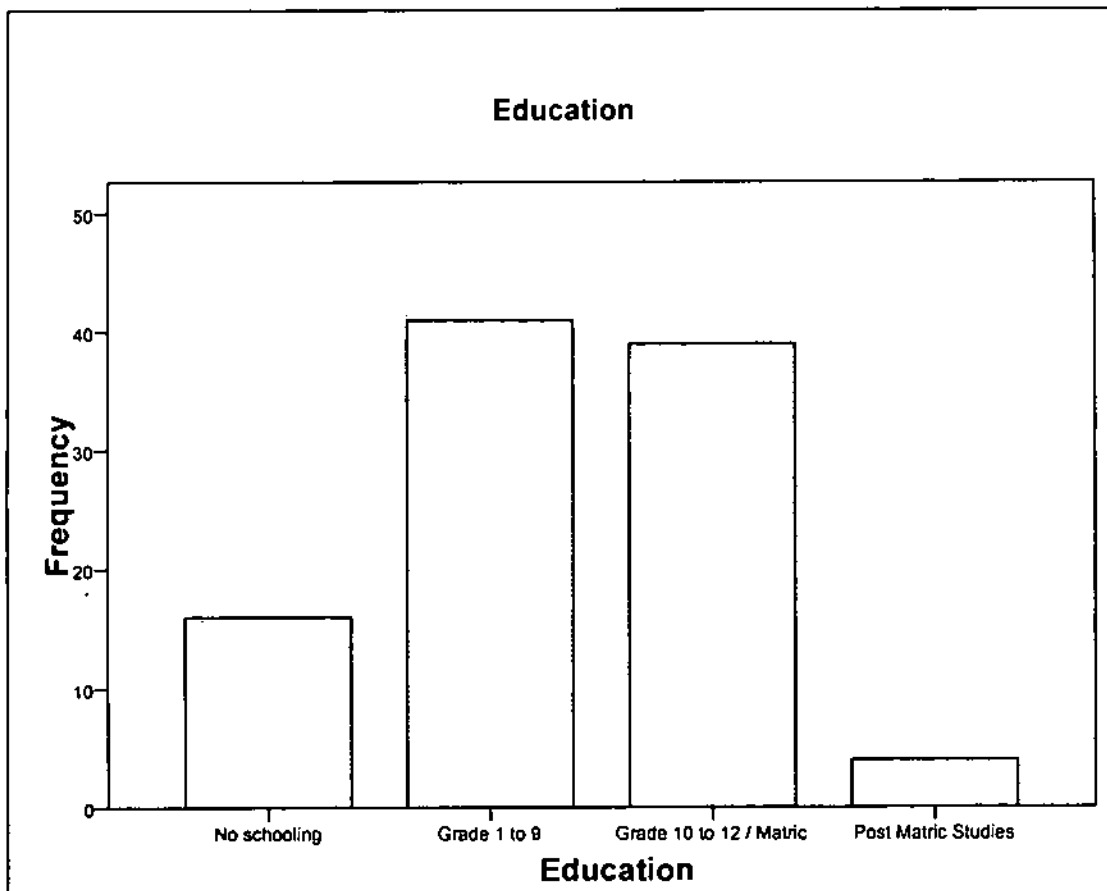


Figure 4-2 Education

The response rate for the questions was one hundred percent and thus without error. 16% of respondents had completed no formal schooling with 41% having formal schooling up to a maximum of grade nine. 39% of respondents had attained formal education from grade 10 to grade 12 (matric) and only 4% having any post matric education.

4.1.3 Household income

Household income was defined to the respondents as being the collective income of the members that resided together at a location. Respondents were presented with four income ranges that were designed in line with LSM 1 to 4 ranges. The respondents were asked to select a category that represented their household income levels.

Household Income					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	R0 to R1,100	83	80.6	82.2	82.2
	R1,101 to R1,900	12	11.7	11.9	94.1
	R1,901 to R2,500	6	5.8	5.9	100.0
	Total	101	98.1	100.0	
Missing	System	2	1.9		
Total		103	100.0		

Table 4-3 Household Income

The results obtained from the survey are detailed in Table 4-3 above and graphically in Figure 4-3 below. 82% of the respondents fell into the R0 to R1,101 category and a further 12% into the R1,101 to R1,901 category, thus representing 94% of respondents. Only 6% of respondents fell into the R1,901 to R2,500 category with none of the respondents surveyed falling in the R2,500 or more category.

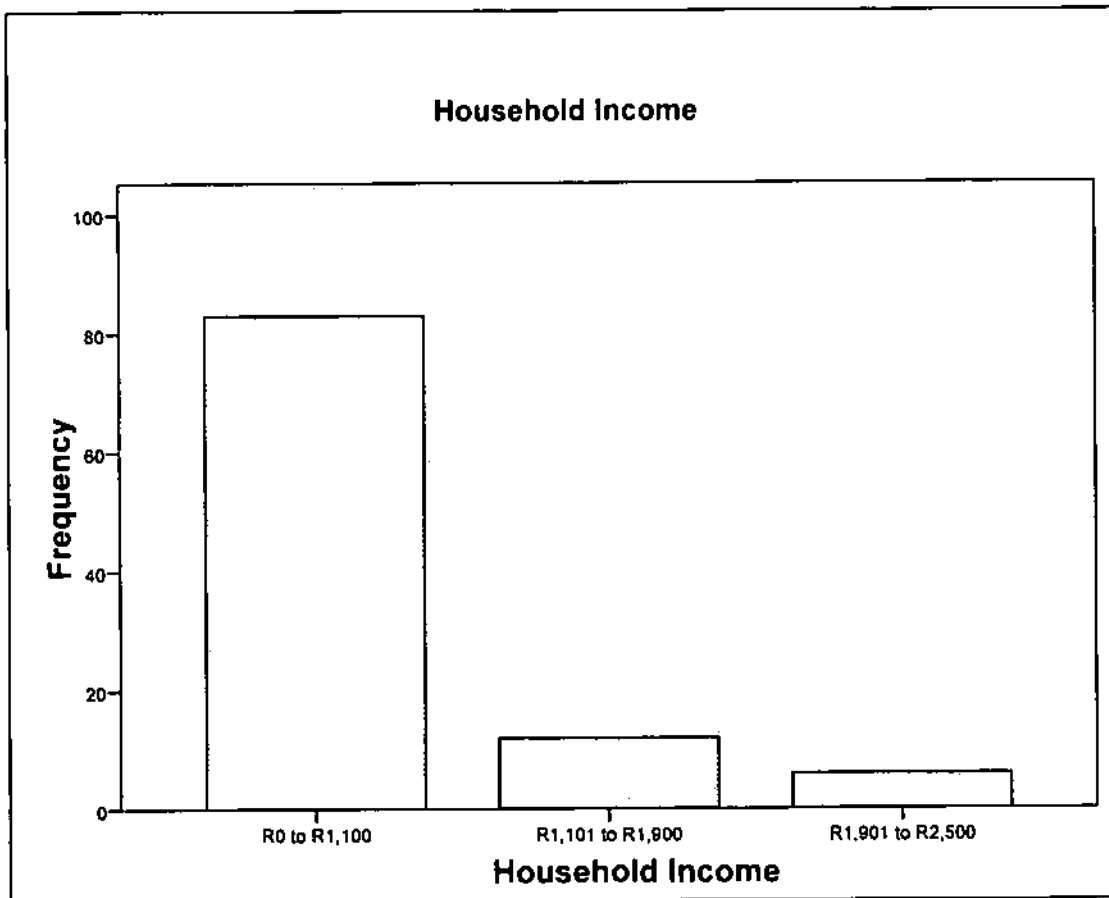


Figure 4-3 Household Income

4.1.4 Type of residence

The type of housing lived in by respondents was defined into four mutually exclusive categories. The first category was defined as a rural hut which is generally accepted as a home made from mud or clay and can be found, not exclusively, in the rural and outlying areas. The second category made provision for shacks as commonly found in urban squatter camps. Category three covered RDP housing as provided by the government and lastly, category four covered housing in established urban areas that would be financed by the resident or their bankers. Categories one and two are commonly homes erected by the residents themselves using a variety of building materials, whilst categories three and four are home built to approved plans using traditional brick and mortar methods.

Residence		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Rural hut	17	16.5	16.7	16.7
	Shack	77	74.8	75.5	92.2
	RDP house	7	6.8	6.9	99.0
	Residential house	1	1.0	1.0	100.0
	Total	102	99.0	100.0	
Missing	System	1	1.0		
Total		103	100.0		

Table 4-4 Residence

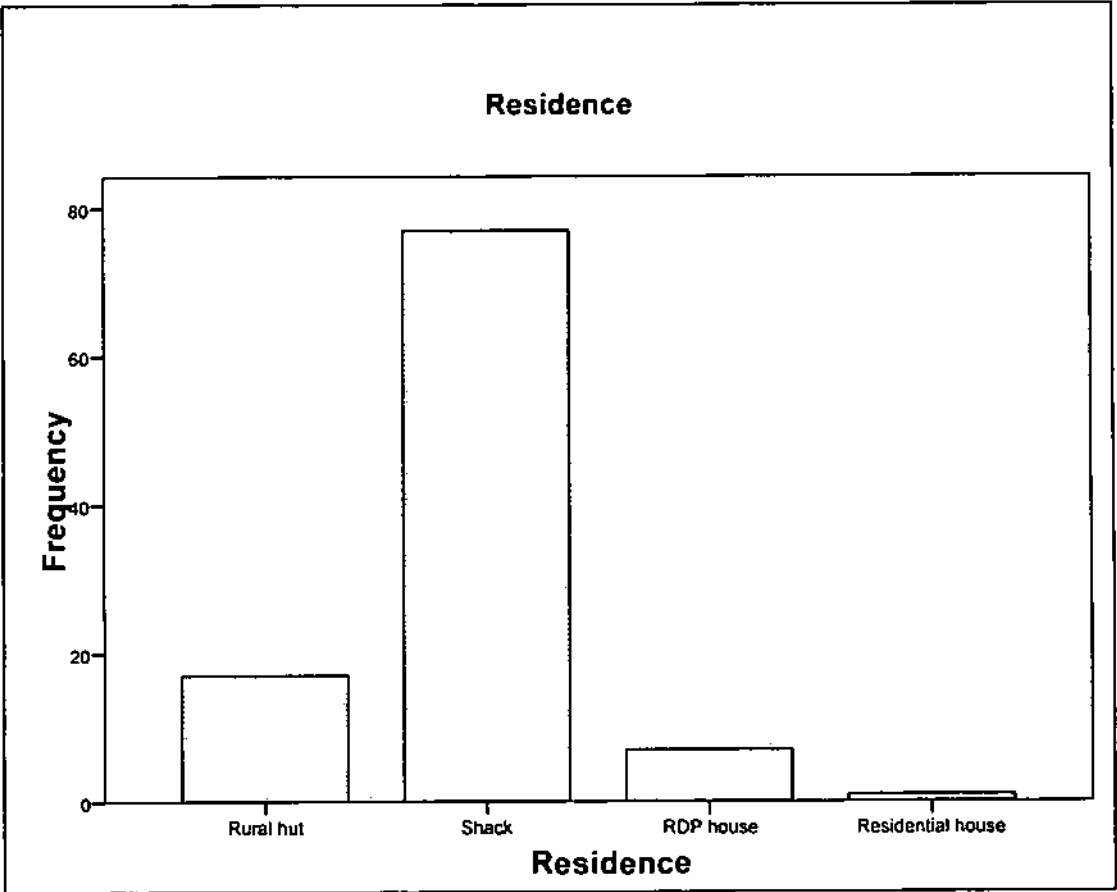


Figure 4-4 Residence

Table 4-4 and Figure 4-4 above summarize the results of the survey, with 16,7% of respondents residing in a rural hut. 75,5% of the respondents resided in shacks and 6,9% having the benefit of being provided with an RDP home. Only 1% of the respondents surveyed lived in an urban residence.

4.1.5 Household amenities

Access to amenities such as running water, running hot water and a flushing toilet, inside or outside the residence, was surveyed across the respondents. These amenities needed to be accessible to respondents at their residence and not where respondents were required to travel for this access.

Amenities - Running Water

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	56	54.4	59.6	59.6
	No	38	36.9	40.4	100.0
	Total	94	91.3	100.0	
Missing	System	9	8.7		
Total		103	100.0		

Table 4-5 Amenities Running Water

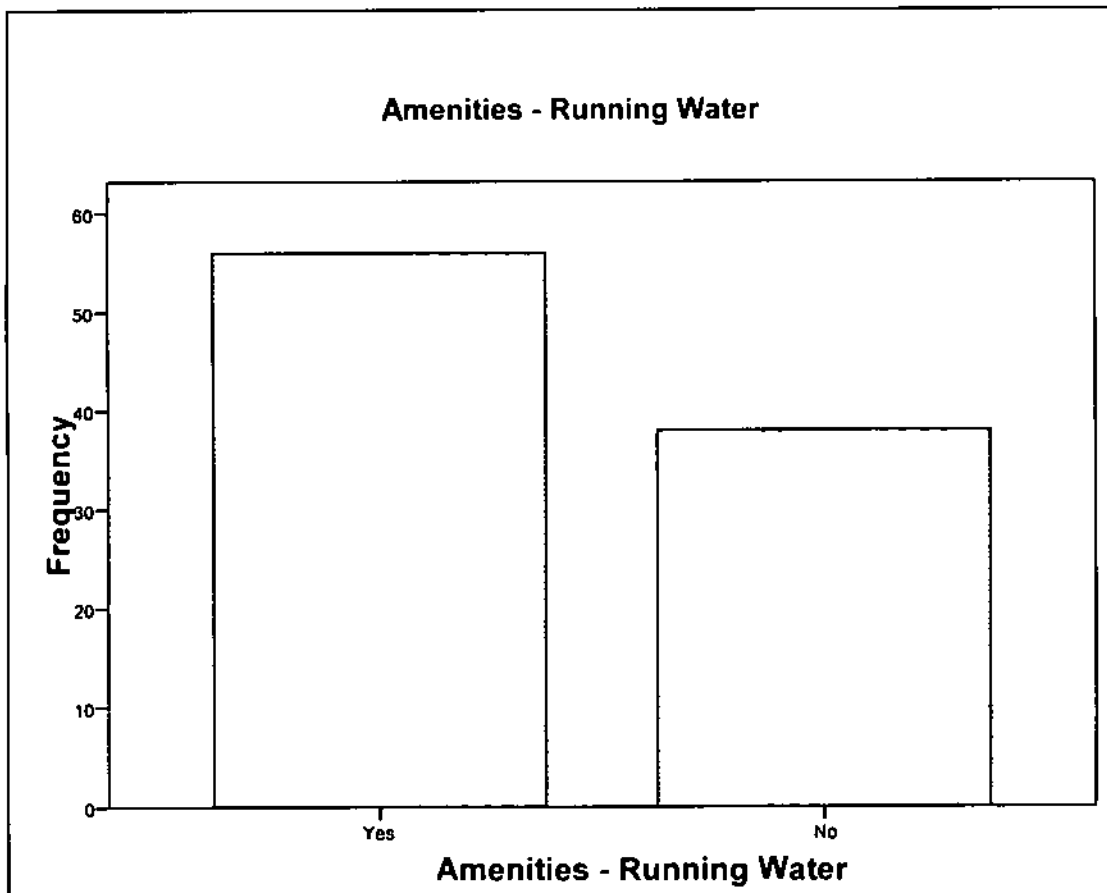


Figure 4-5 Amenities – Running Water

Access to running water was confirmed by 59,6% of the respondents whilst the remaining 40,4% did not have direct access.

Amenities - Running Hot Water

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	4	3.9	4.7	4.7
	No	82	79.6	95.3	100.0
	Total	86	83.5	100.0	
Missing	System	17	16.5		
Total		103	100.0		

Table 4-6 Amenities – Running Hot Water

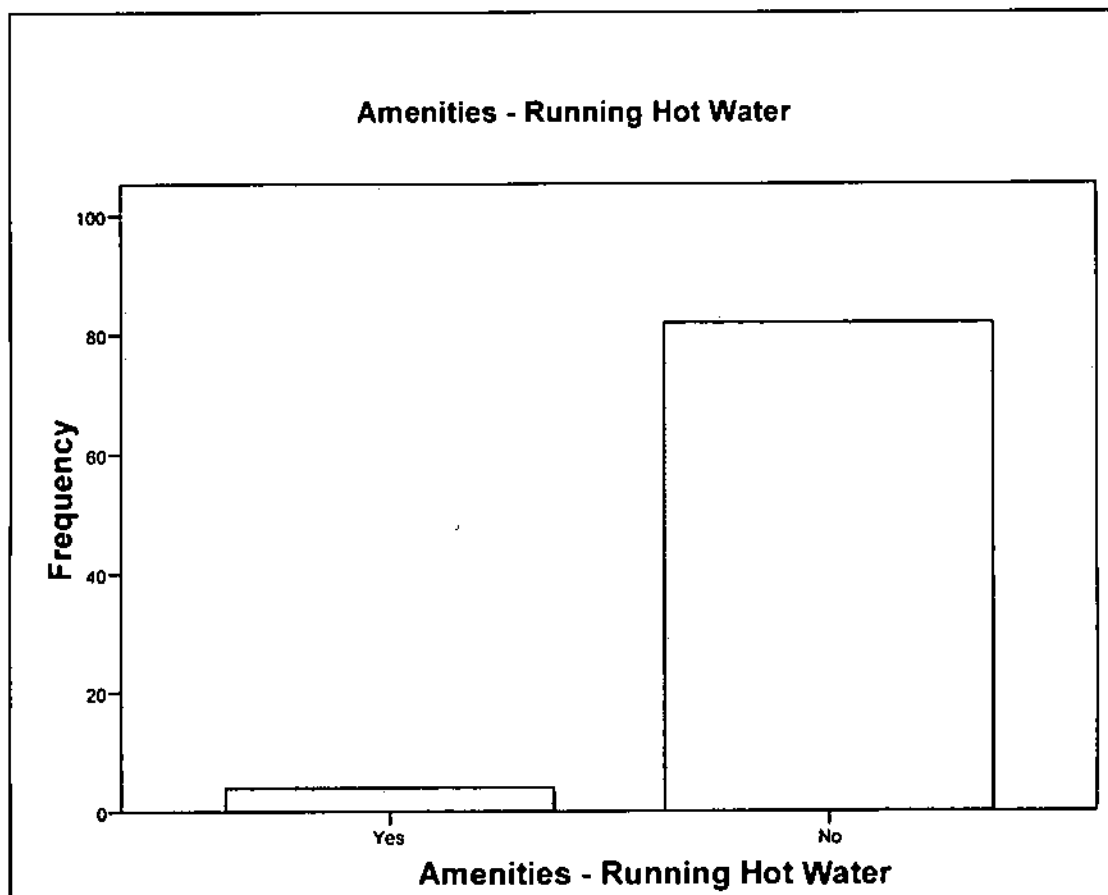


Figure 4-6 Amenities – Running Water

Access to hot running water was only confirmed by 4,7% of the respondents with 95,3% not having access to hot running water. Access to hot running water would require the residence to own a geyser which in turn would require electricity which was not surveyed. However, it is clear that hot running water can be considered to be a luxury more so than being an amenity.

Amenities - Flushing Toilet					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	56	54.4	60.2	60.2
	No	37	35.9	39.8	100.0
	Total	93	90.3	100.0	
Missing	System	10	9.7		
Total		103	100.0		

Table 4-7 Amenities – Flushing Toilet

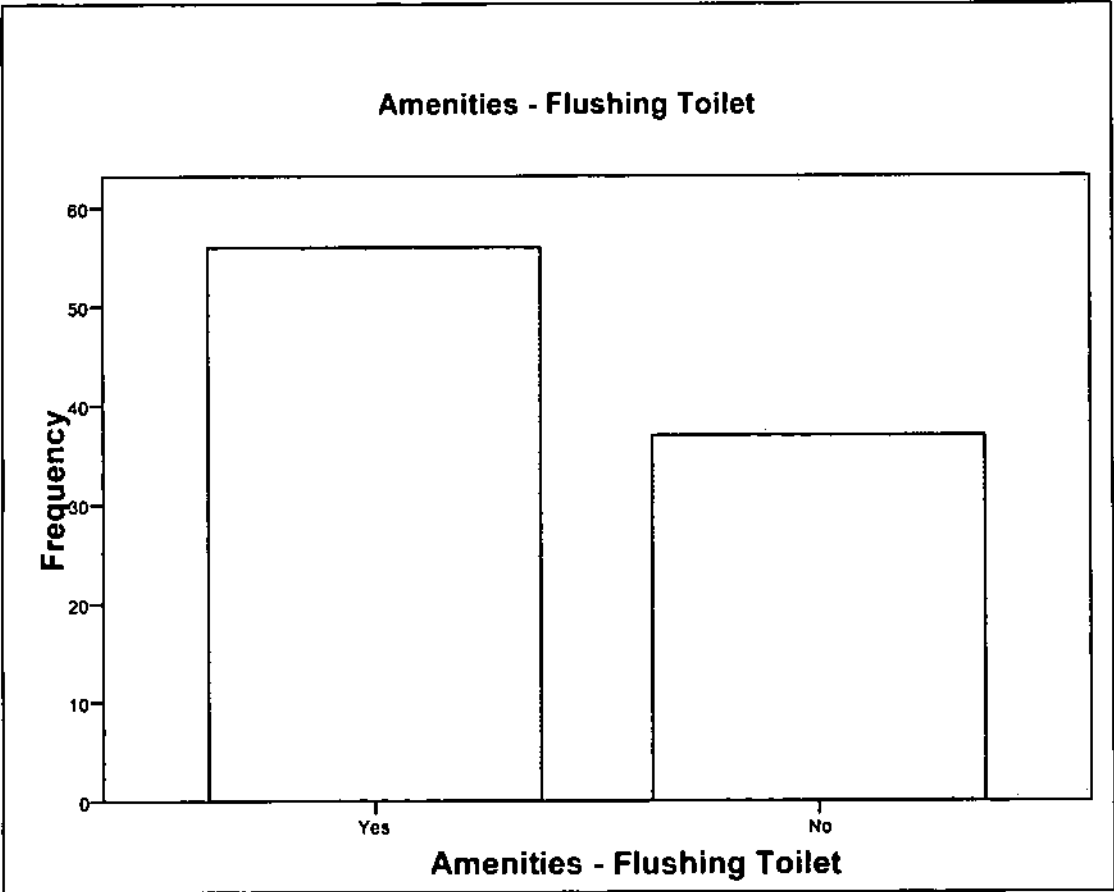


Figure 4-7 Amenities – Flushing Toilet

Access to a flushing toilet, inside or outside the residence, was confirmed by 60,2% of the respondents whilst 39,8% did not have access to a flushing toilet outright. The results here are similar to those respondents having direct access to running water with the likelihood that these respondents have municipal water and electricity connections to their property stands, irrespective of the type of residence the respondent has erected. Whilst

stands may have municipal connections, the lack of access to hot water could be attributed to the respondent's ability to purchase a hot water geyser.

4.1.6 Household Luxuries

Living Standards Measures (LSM) provides an overview as to the appliances or luxuries that any one household has direct access to. At lower LSM levels (1 to 2), access to appliances and amenities is expected to be low. Moving to higher LSM levels, where access to amenities is improved, and households would have higher access to appliances or luxuries.

A selection of luxuries and appliances that included, a radio or hi-fi set, television set, telephone or cellular phone, refrigerator (inclusive of fridge-freezer combo) and a motor vehicle owned by the household was surveyed. These items were selected to enable further confirmation of LSM categorization of the respondents taking part in the survey and to assess the communication mechanisms available for advertising and building brand awareness of products. Each category's responses is tabled below;

Radio / Hi-Fi in Household					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	60	58.3	61.2	61.2
	No	38	36.9	38.8	100.0
	Total	98	95.1	100.0	
Missing	System	5	4.9		
Total		103	100.0		

Table 4-8 Radio / Hi-Fi in Household

Over 61,2% of respondents in the survey confirmed that their household owned a radio or hi-fi set, with the remaining 38,8% not.

Television Set in Household

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	55	53.4	57.3	57.3
	No	41	39.8	42.7	100.0
	Total	96	93.2	100.0	
Missing	System	7	6.8		
Total		103	100.0		

Table 4-9 Television Set in Household

Television sets were confirmed as owned appliances by 57,3% of the respondents surveyed with the remaining 42,7% having no direct access to a television in their household. With access to electricity being a limitation in owning appliances in lower LSM categories, it was not surveyed as to how lack of electricity may have impacted the ownership of a radio or television.

Telephone in Household

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	57	55.3	58.8	58.8
	No	40	38.8	41.2	100.0
	Total	97	94.2	100.0	
Missing	System	6	5.8		
Total		103	100.0		

Table 4-10 Telephone in Household

Respondents surveyed confirmed that 58,8% owned either a Local Area Network (LAN) telephone or a cellular phone in their household. 41,2% of respondents did not own either communication medium.

Refridgerator in Household

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	41	39.8	43.6	43.6
	No	53	51.5	56.4	100.0
	Total	94	91.3	100.0	
Missing	System	9	8.7		
Total		103	100.0		

Table 4-11 Refrigerator in Household

56,4% of respondents surveyed did not own a refrigerator, including a fridge-freezer combo. 43,6% confirmed that their household owned a refrigerator, although it was again not surveyed as to how lack of electricity may have impacted this result.

Motor Vehicle owned by Household					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	10	9.7	11.4	11.4
	No	78	75.7	88.6	100.0
	Total	88	85.4	100.0	
Missing	System	15	14.6		
Total		103	100.0		

Table 4-12 Motor Vehicle owned by Household

Only 11,4% of respondents surveyed confirmed that their household owned a motor vehicle, while 88,6% of households had no motor vehicles. The results of luxuries owned by the respondents surveyed are summarized in Figure 4-8 Summary of Luxuries Owned below.

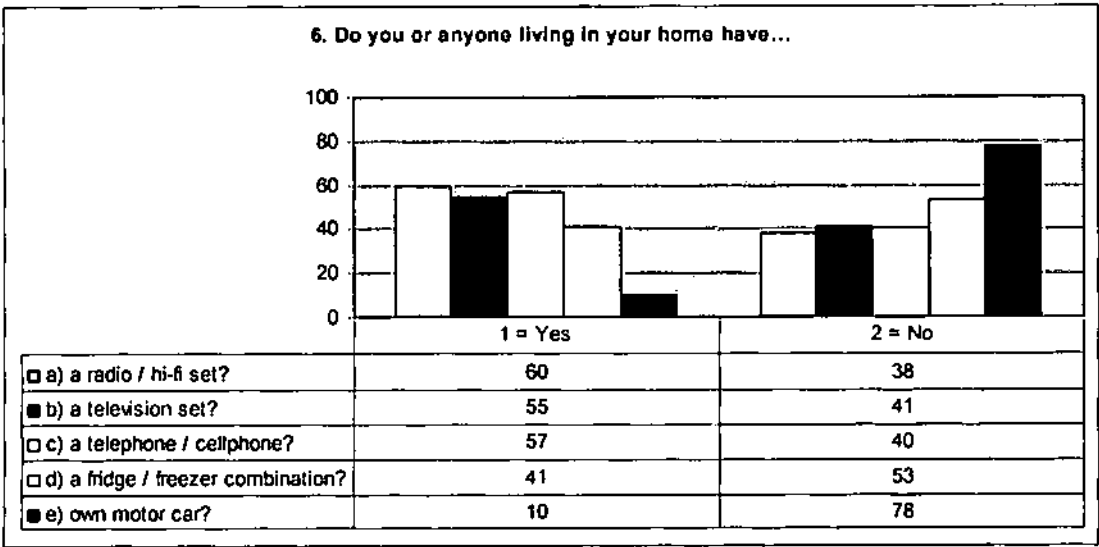


Figure 4-8 Summary of Luxuries Owned

4.1.7 Grocery Shopping Location

Typical purchase location of the respondents was surveyed according to three general location types. Spaza shops, being location type one, are defined as

independent convenience stores generally located in rural and informal settlements. These are stores that stock few varieties of products including basic foodstuffs. Location type two, was defined as independent wholesalers or Cash & Carry's. A large variety of goods are stocked yet sold on bulk basis. Per unit prices may be cheaper, yet inability to buy single units can make bulk purchases more expensive. Location type three is defined as the major retailers and include the likes of Shoprite Checkers, Pick 'n Pay and Spar. These retailers cater for a broad range of consumers with many product varieties. These retailers are not found in informal settlements and consumers from these areas would need to travel here to make purchases.

Grocery Shopping Location

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Spaza Shop	40	38.8	40.4	40.4
	Cash and Carry	25	24.3	25.3	65.7
	Supermarket	34	33.0	34.3	100.0
	Total	99	96.1	100.0	
Missing	System	4	3.9		
Total		103	100.0		

Table 4-13 Grocery Shopping Location

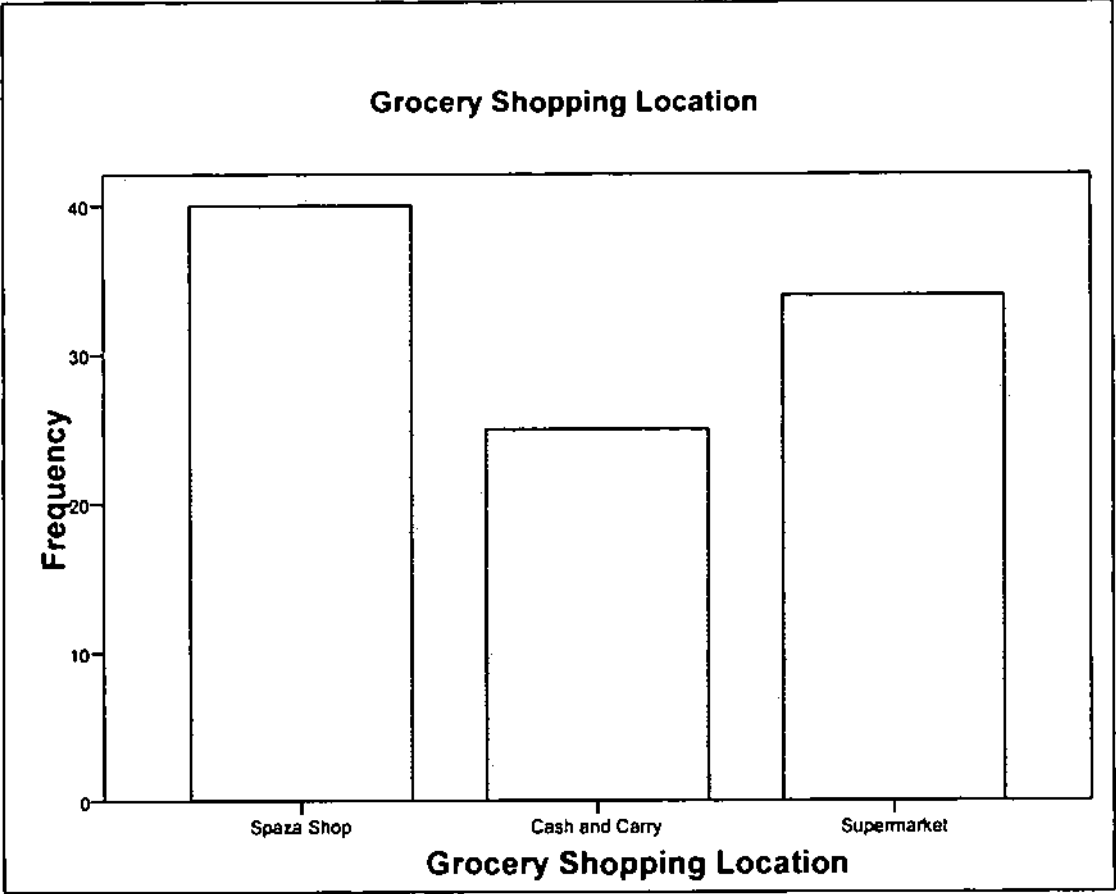


Figure 4-9 Grocery Shopping Location

4.1.8 Means of Transport

Means of transport was established by surveying respondents as to the method of transport used by them to reach purchase locations. Four options were presented to respondents and included, walking to these locations and making use of public transport in the form of a minibus taxi. Options were also provided where respondents could be transported by motor vehicle of another household or a vehicle owned in their own household.

Means of Transport					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Walk	32	31.1	31.7	31.7
	Catch a taxi	66	64.1	65.3	97.0
	Drive with a friend	2	1.9	2.0	99.0
	Use my own car	1	1.0	1.0	100.0
	Total	101	98.1	100.0	
Missing	System	2	1.9		
Total		103	100.0		

Table 4-14 Means of Transport

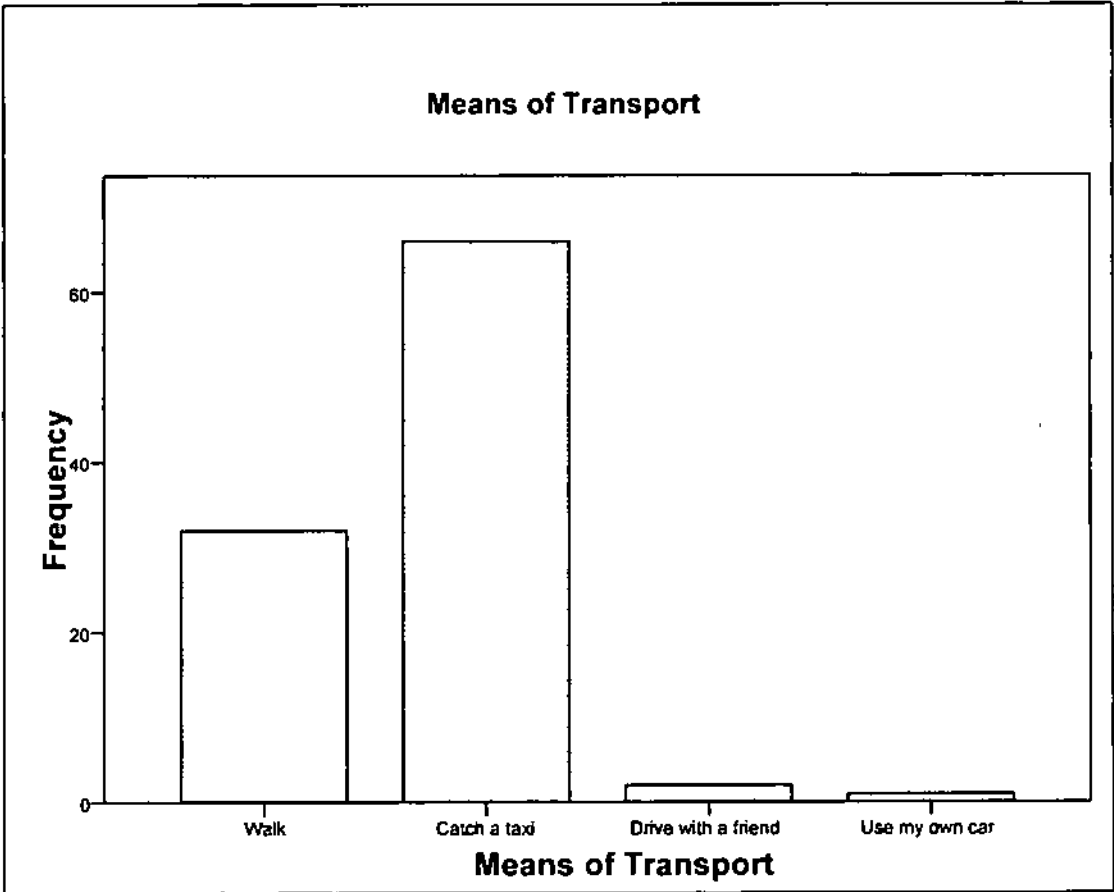


Figure 4-10 Means of Transport

Arriving at the purchase location by means of walking was confirmed by 31,7% of respondents. 65,3% of respondents surveyed made use of minibus taxi transport to purchase locations with only 3% of respondents making using of their own car or being afforded transport by motor vehicle of another household.

To obtain a more meaningful result in respect of purchase location and transport used to the location, a cross-tabulation exercise was performed as detailed in Table 4-15. This method of analysis was used to what method of transport was used to arrive at the various types of purchase location.

Means of Transport * Grocery Shopping Location Crosstabulation

Count		Grocery Shopping Location			Total
		Spaza Shop	Cash and Carry	Supermarket	
Means of Transport	Walk	31	0	0	31
	Catch a taxi	7	25	32	64
	Drive with a friend	1	0	1	2
	Use my own car	0	0	1	1
Total		39	25	34	98

Table 4-15 Transport Crosstabulation

Walking was identified as the preferred means of transport for 31 respondents who made use of a Spaza Shop type location, with no respondents using this mean of transport to Cash & Carry and Supermarket type locations. Making use of minibus taxi, seven respondents used such to the Spaza Shop type location, with 25 using same to Cash & Carry type locations and a further 32 using same to Supermarket locations.

4.2 Section 2: Choice of Milk in Buying Scenario

Respondents were presented with a sample of 2-litre milk bottles that were displayed in an in-store simulation. A total of ten bottles were presented of ten various brands, but excluding national brands to limit the exposure to the brands presented. Each brand was allocated a price with two brands selected as "cheap" brands. Two brands were allocated price premiums based on the packaging elements used, such as the white pigmented bottle and the wraparound label. The remaining six brands were allocated the same price, lower than the premium and higher than the "cheap" version.

Respondents were presented with the scenario in which their supply of fresh milk at home was depleted and they had R15,00 available to purchase milk. The ten brands in the sample were provided as the products the respondents could choose from and a purchase of one bottle had to be made.

Once the purchase decision had been made, respondents were asked to select from a predefined list of the options as to the reason they selected a particular bottle. The predefined list was based on elements of the product that included brand awareness, price, colour use etc.

The aim of the scenario was to establish an initial overview of respondent choice preference when making a purchase decision. This overview would thus highlight the preferences of the respondents which were then comparable to further sections of the study where the various sections placed emphasis on specific elements in isolation.

Table 4-16 below summarises the respondent's choices as collected in the survey which is further graphically represented in Figure 4-11. Table 4-17 summarises the reasons for the choice selection of the respondents. The results of Table 4-16 and Table 4-17 were then compared using cross-tabulation methodology and summarised in Table 4-18.

Choice of Milk in Buying Scenario

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dewfresh	10	9.7	10.3	10.3
	Clarabell's Dairy	27	26.2	27.8	38.1
	Wynn-with	8	7.8	8.2	46.4
	Coetzee Dairy	14	13.6	14.4	60.8
	Douglasdale	9	8.7	9.3	70.1
	Rand Dairy	3	2.9	3.1	73.2
	Fresh Pak Dairy	4	3.9	4.1	77.3
	Dairy World	3	2.9	3.1	80.4
	Oak Tree Dairy	4	3.9	4.1	84.5
	Kruin Dairy	15	14.6	15.5	100.0
	Total	97	94.2	100.0	
Missing	System	6	5.8		
Total		103	100.0		

Table 4-16 Milk Choice in Buying Scenario

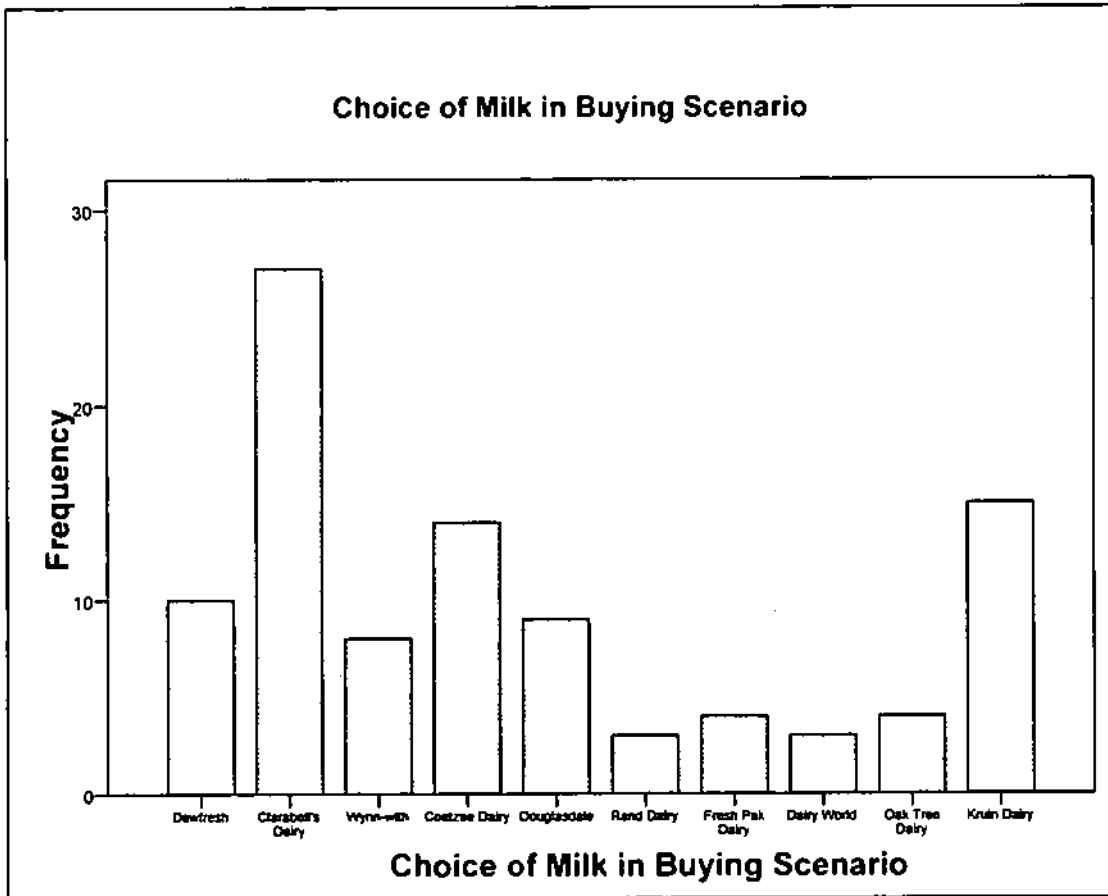


Figure 4-11 Milk Choice in Buying Scenario

Clarabell's Dairy had the highest rate of selection by respondents at 27,8%. Coetzee Dairy and Kruin Dairy were selected by 14,4% and 15,5% of respondents respectively. Dewfresh and Douglasdale were selected by 10,3% and 9,3% respectively. The remaining four brands had low selection rates. It is notable that the Clarabell and Douglasdale bottles were presented at a price premium. Both the Coetzee Dairy and Kruin Dairy bottles were presented at the lowest price.

Milk Choice Substantiation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I know and trust the name	33	32.0	32.4	32.4
	I like the label picture	13	12.6	12.7	45.1
	I like the label colours	3	2.9	2.9	48.0
	I like the type of bottle	4	3.9	3.9	52.0
	The price was right for me	40	38.8	39.2	91.2
	I just like the whole bottle	9	8.7	8.8	100.0
	Total	102	99.0	100.0	
Missing	System	1	1.0		
Total		103	100.0		

Table 4-17 Milk Choice Substantiation

The reasons for respondent's selection of the various bottles in Table 4-16 is summarized in Table 4-17 above. 39,2% of respondents selected a bottle based on the price thereof. 32,4% of respondents made their selection on the brand name of the product. The four remaining options had lower selection rates with highest rate being 12,7% selecting a bottle based on the label picture. To obtain further information on these choice preferences, the bottle selection made was compared with the reason for the selection using crosstabulation.

Choice of Milk In Buying Scenario * Milk Choice Substantiation Crosstabulation

Count		Milk Choice Substantiation						Total
		I know and trust the name	I like the label picture	I like the label colours	I like the type of bottle	The price was right for me	I just like the whole bottle	
Choice of Milk in Buying Scenario	Dewfresh	1	0	0	0	6	3	10
	Clarabell's Dairy ↑	15	5	0	0	5	1	26
	Wynn-with	1	1	0	1	4	1	8
	Coetzee Dairy ↓	5	0	0	1	7	1	14
	Douglasdale ↑	3	1	0	1	4	0	9
	Rand Dairy	1	0	0	0	1	1	3
	Fresh Pak Dairy	1	1	1	0	1	0	4
	Dairy World	1	1	1	0	0	0	3
	Oak Tree Dairy	0	2	0	0	2	0	4
	Kruin Dairy ↓	4	0	1	0	8	2	15
Total		32	11	3	3	38	9	96

Table 4-18 Milk Brand compared to Choice Substantiation

In the bottle selection results, the Clarabell sample was the most frequently selected bottle. In Table 4-18 above, Clarabell was selected the most

frequently under the brand category. Clarabell was again the most frequently selected bottle in the label picture category. No bottle preference was significant in the label colour and bottle type category. Kruin Dairy and Coeztee were the most frequently selected bottles in the price category, with Dewfresh, Clarabell, Wynn-with and Douglasdale selected with some frequency. Few respondents selected a bottle based on its overall appeal with Dewfresh being selected the most frequently albeit by only three respondents.

Sections 3 to 7 hereafter focused on the respondents preferences where elements of the bottles were considered in isolation.

4.3 Section 3: Packaging Medium

The emphasis of this section was to obtain information as to how the packaging medium had an impact on the choice decision of respondents. Six questions in the survey related specifically to the packaging medium, in this case a two litre HDPE jug. Current market segment trend in the two litre dairy milk packaging medium is to use a clear HDPE bottle with an emerging trend being the use of a white pigmented HDPE bottle.

4.3.1 Bottle Type Identification

Milk packaged in either the clear pigmented HDPE bottle or the white pigmented HDPE bottle ultimately has a very similar appearance. As milk is a naturally white colour liquid, its use in a clear HDPE bottle creates an overall white appearance of the product. Thus a white pigmented bottle has a similar appearance to a clear bottle full of milk, with the exception of a small gap between the liquid level of a full bottle and the bottle cap. As such, it was expected by the researcher that respondents would not easily distinguish the difference in the simulation.

Respondents were shown the sample of ten milk jugs in an in-store shelf simulation. They were then asked to identify the bottles in the sample that were the white pigmented HDPE bottles amongst the sample of clear HDPE

bottles. Only two of the bottles contained in the sample were white pigmented HDPE bottles, the Clarabell and DouglasDale bottles, with the remaining eight being the clear bottles.

Respondents had the option of making more than one selection in indicating which samples they believed used the white pigmented bottle. The responses from the survey are detailed in Figure 4-12.

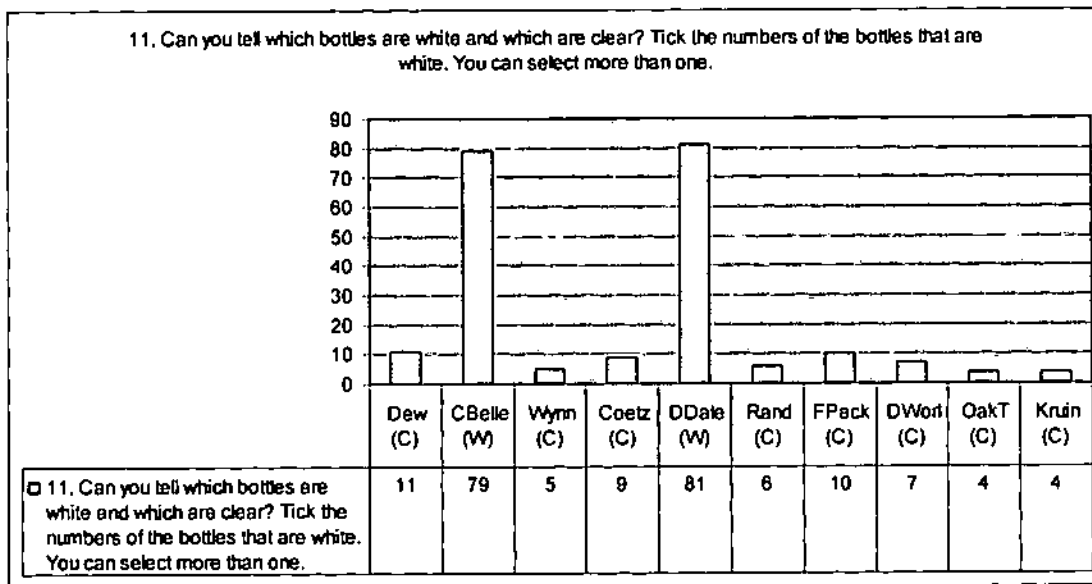


Figure 4-12 Bottle Type Identification

Of the 103 respondents that took part in the survey, 81 respondents correctly identified the Douglasdale bottle as a white bottle, representing 79% of the sample. 79 respondents correctly identified the Clarabell bottle as being white, representing 77%. The only significant results thereafter was 11 respondents, equal to 11%, incorrectly selected Dewfresh as being a white bottle. A similar result was found with the Fresh Pack Dairy bottle which was selected by 10 respondents, or 10%, incorrectly.

4.3.2 Bottle Preference

The respondent's choice preference was tested for between a white pigmented bottle and the clear bottle. The use of the white pigmented bottle is an emerging trend in the packaging of milk and as such is used not only to differentiate the product, but it is also marketed as being milk of quality and being able to command a premium through its "cleaner" white appearance. It is believed that the white bottle is more aesthetically pleasing than its clear counterpart. Respondents were shown two empty, unlabelled and uncapped bottles, one being clear and the other the white pigmented alternative, in isolation. Here the appearance was significantly different between the bottles and respondents were asked to select the bottle they preferred.

Bottle Preference

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	White Pigmented Bottle	58	56.3	56.9	56.9
	Clear Bottle	44	42.7	43.1	100.0
	Total	102	99.0	100.0	
Missing	System	1	1.0		
Total		103	100.0		

Table 4-19 Bottle Preference

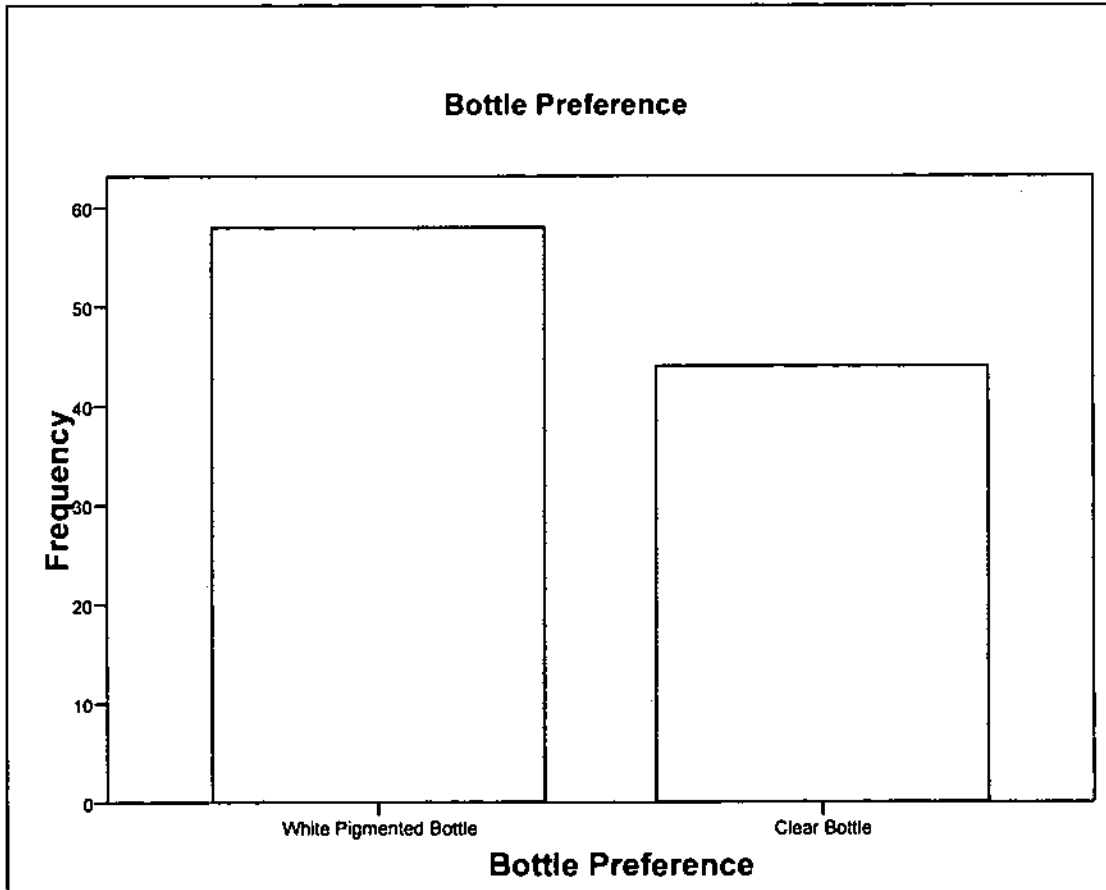


Figure 4-13 Bottle Preference

The white bottle was preferred by 57% of the respondents with the remaining 43% preferring the clear bottle.

4.3.3 Product Visibility

The use of the white pigmented bottle takes away the consumers ability to see the milk contained in the bottle. The ability to see the milk in a clear bottle allows the consumer to assess whether the bottle actually contains the said amount of milk. Furthermore it allows the consumer to identify milk that may be blatantly defective i.e. fresh milk will show signs of separation as it deteriorates beyond its expected quality levels and provides a visual signal to consumers. The white bottle limits the consumer in their ability to make these assessments and as such is expected to be the lesser preferred option.

		Product Visibility			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	83	80.6	82.2	82.2
	No	18	17.5	17.8	100.0
	Total	101	98.1	100.0	
Missing	System	2	1.9		
Total		103	100.0		

Table 4-20 Product Visibility

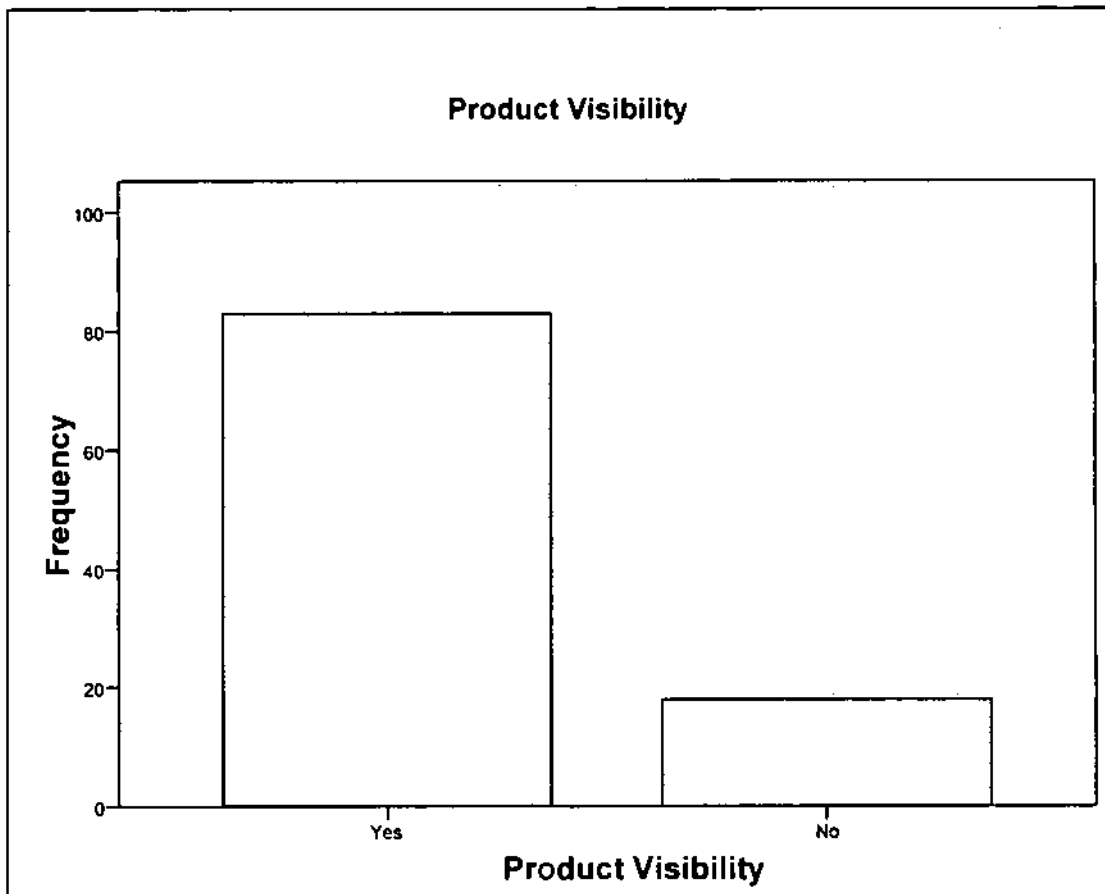


Figure 4-14 Product Visibility

The ability to be able to see the milk in the bottle was preferred by 82,2% of respondents. 17,8% of respondents did not require the ability to see the milk in the bottle.

4.3.4 White Bottle effect on Quality Perception

The "clean" appearance of a white pigmented bottle is aesthetically more pleasing and serves to create the perception that milk that is packaged in a white pigmented bottle has an improved quality appearance, and thus that the product contained therein is of a superior quality than that milk contained in the traditional clear bottle. It is believed that the white bottle will be preferred by the consumer as it may have this improved quality perception.

White Bottle effect on Quality Perception

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	67	65.0	65.7	65.7
	No	35	34.0	34.3	100.0
	Total	102	99.0	100.0	
Missing	System	1	1.0		
Total		103	100.0		

Table 4-21 White Bottle effect on Quality Perception

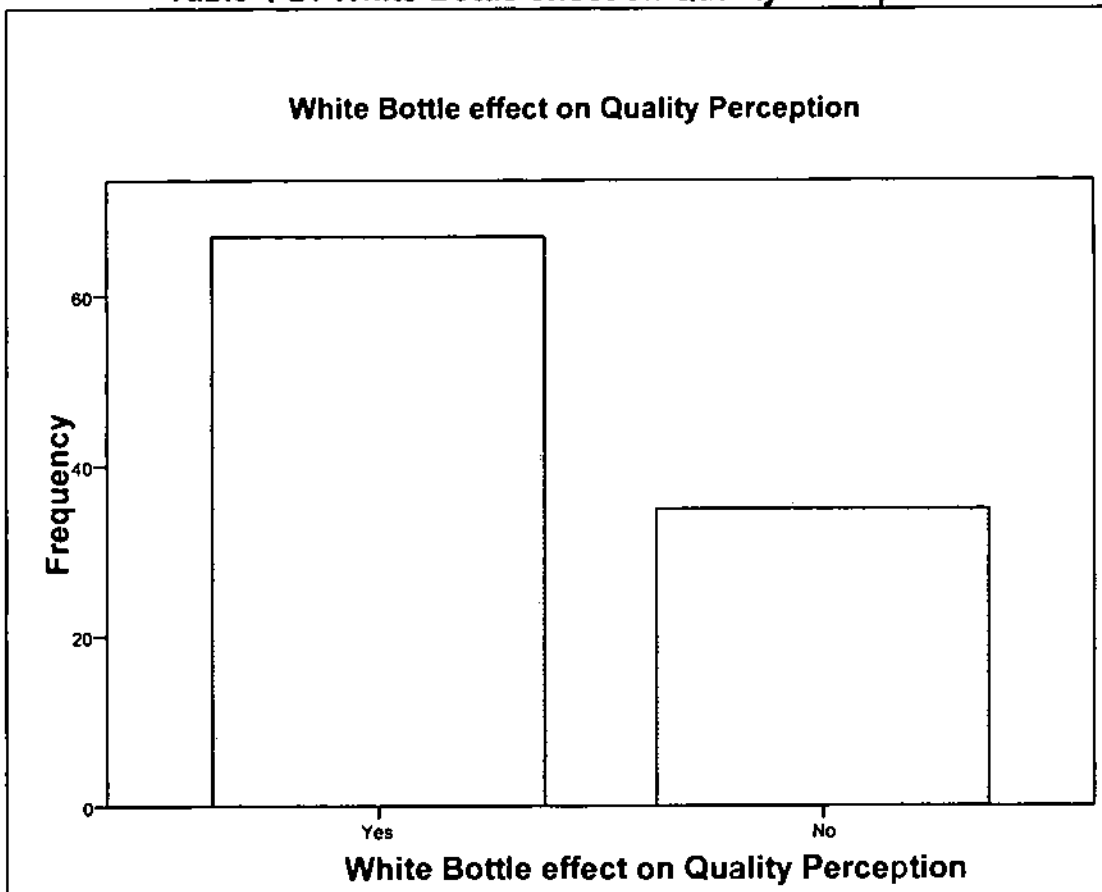


Figure 4-15 White Bottle effect on Quality Perception

The perception that the white bottle gives the product an improved quality appearance over the clear bottle was supported by 65,7% of the respondents, with 34,3% not supporting the perception of improved quality.

4.3.5 White Bottle Price Premium

With the perception that milk that is packaged in a white pigmented bottle has an improved quality appearance, is aesthetically more pleasing to the consumer and would be preferred to that of the clear bottle, it needed to be established as to whether a price premium could be realised over the clear bottle. It is assumed that consumers would be prepared to pay a premium for the white bottle, it was still expected that for many consumers price was still an important factor based on levels of disposable income in the LSM groups 1 to 4, the focus of the study.

White Bottle Price Premium

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	65	63.1	64.4	64.4
	No	36	35.0	35.6	100.0
	Total	101	98.1	100.0	
Missing	System	2	1.9		
Total		103	100.0		

Table 4-22 White Bottle Price Premium

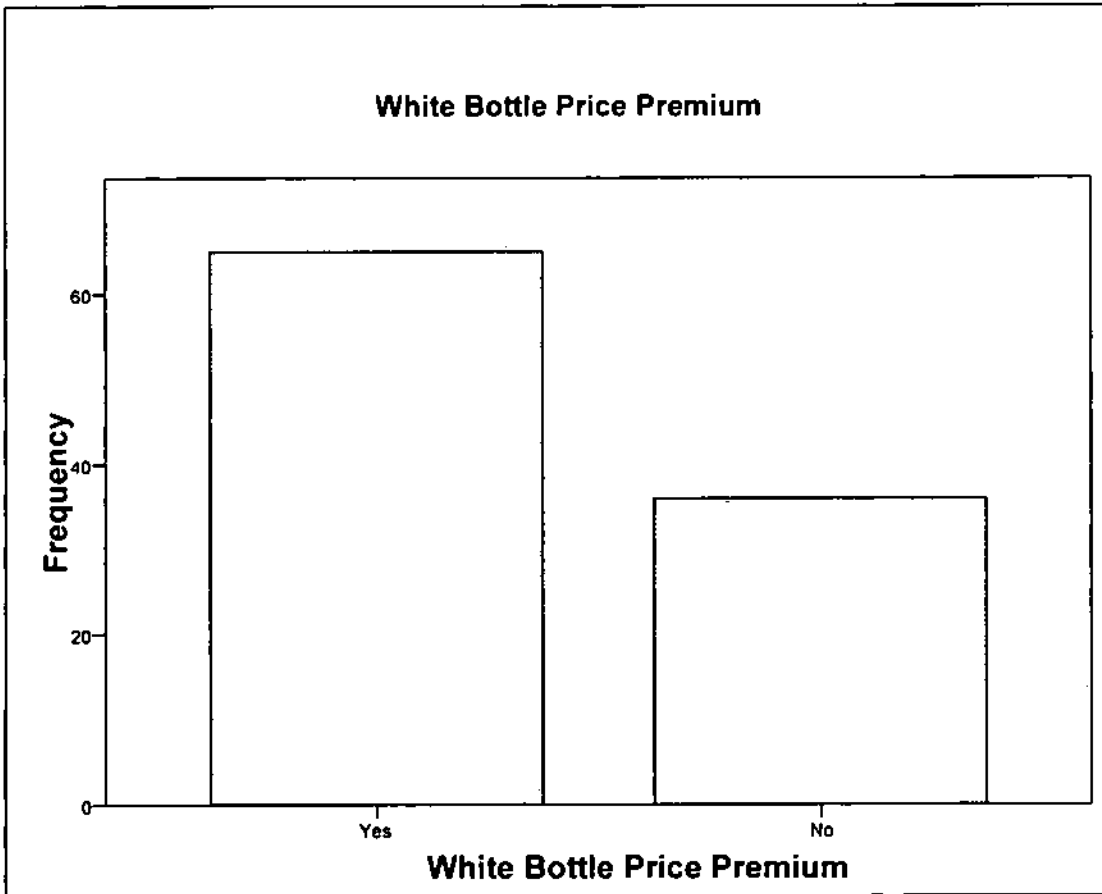


Figure 4-16 White Bottle Price Premium

The results of the respondent's response to the question of paying a premium indicate that 64,4% of respondents would in fact be prepared to pay such. The results highlight that there still is a large portion (35,6%) of consumers who are not prepared to pay a premium for the bottle.

4.3.6 Empty Bottle

Respondents were asked as to their habitual use of the milk containers once they were empty of milk. It was assumed that many consumers in the study would retain the empty bottle and use such for storage of non-milk liquids such as paraffin or water. Although it was not assumed that consumers would retain every bottle acquired, respondents were asked what they did with the empty bottle in the majority of instances.

Empty Bottles		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dispose	34	33.0	33.7	33.7
	Storage	67	65.0	66.3	100.0
	Total	101	98.1	100.0	
Missing	System	2	1.9		
Total		103	100.0		

Table 4-23 Empty Bottles

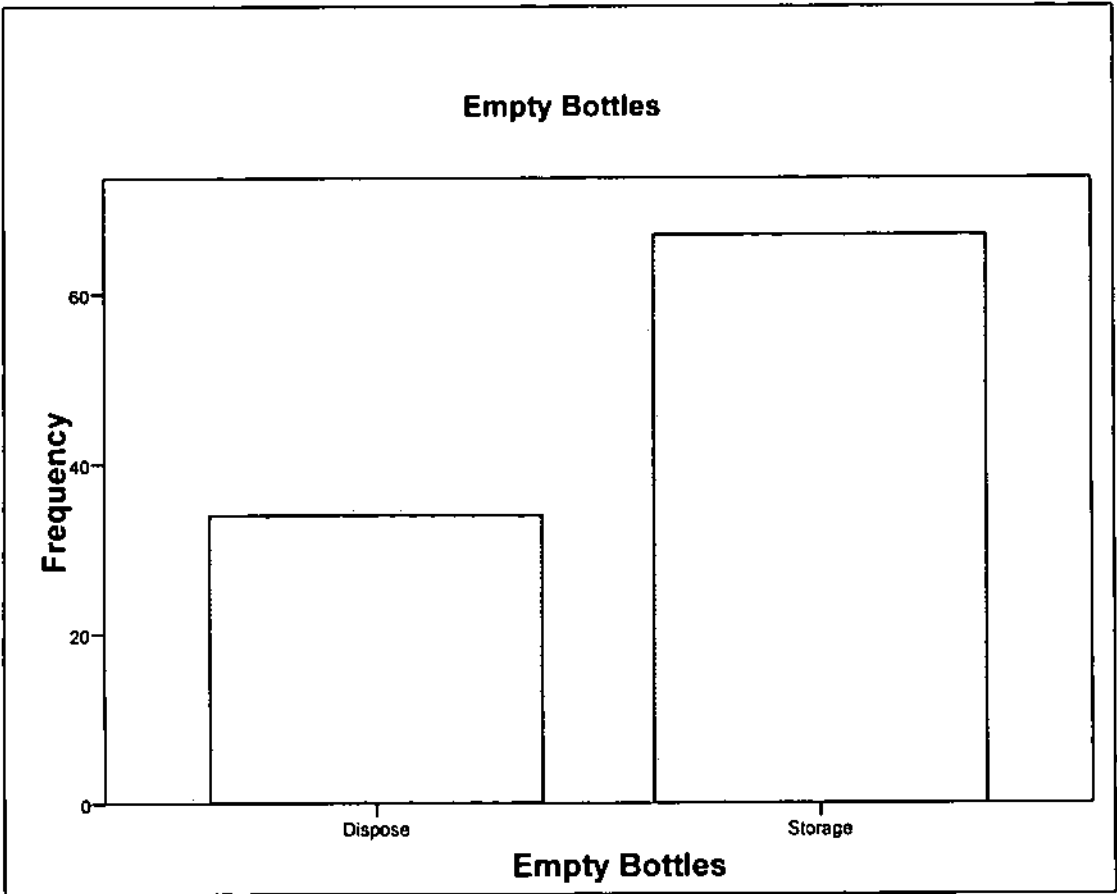


Figure 4-17 Empty Bottles

The results of the respondents surveyed indicate that empty bottles are retained for storage as opposed to being disposed. 66,3% of the sample answered that they did use bottles for storage while the remaining 33,7% disposed of the bottles.

4.4 Section 4: Labels

With fresh milk being considered a commodity product, there is little room for gaining competitive advantage over rival dairies through cost leadership strategies or niche market strategy. To a large extent it is also difficult to differentiate products in the fresh milk segment but for the packaging design. In this packaging design the label, used on the two litre HDPE bottles, is one of the key areas where dairies can differentiate their products from the competition.

This section was designed and used to extract information related to the preferences for the type of labels used e.g. a wraparound label versus an adhesive label.

Wraparound labels are applied in a sleeve format around the bottle covering a portion of the four panels whereas an adhesive label is limited to the front panel. As such, a wraparound label provides a greater surface area for colour, picture and brand versus the adhesive option. The sticker label has a cost advantage over the wraparound label due to use of lesser materials in its manufacture.

A final point on wraparound labels is that they are manufactured in most instances from plastic film and have a high gloss finish. Whilst adhesive labels are manufactured from paper, they too can have a high gloss finish, but the overall effect is not as aesthetically pleasing as that achieved on the plastic wraparound.

4.4.1 Label Type Identification

As the wraparound covers more surface area on a bottle than the adhesive label, it was expected that it would be more easily identifiable by the consumer. This was tested by the use of the in store simulation of a sample of ten two litre milk samples.

Of the ten samples used in the simulation, wraparound labels were used on three and adhesive labels used on the remaining seven. Respondents were asked to identify the bottles that made use of the wraparound label and were not limited in the number of selections they could make. The results of the question posed to the respondents is summarised in Figure 4-18 below.

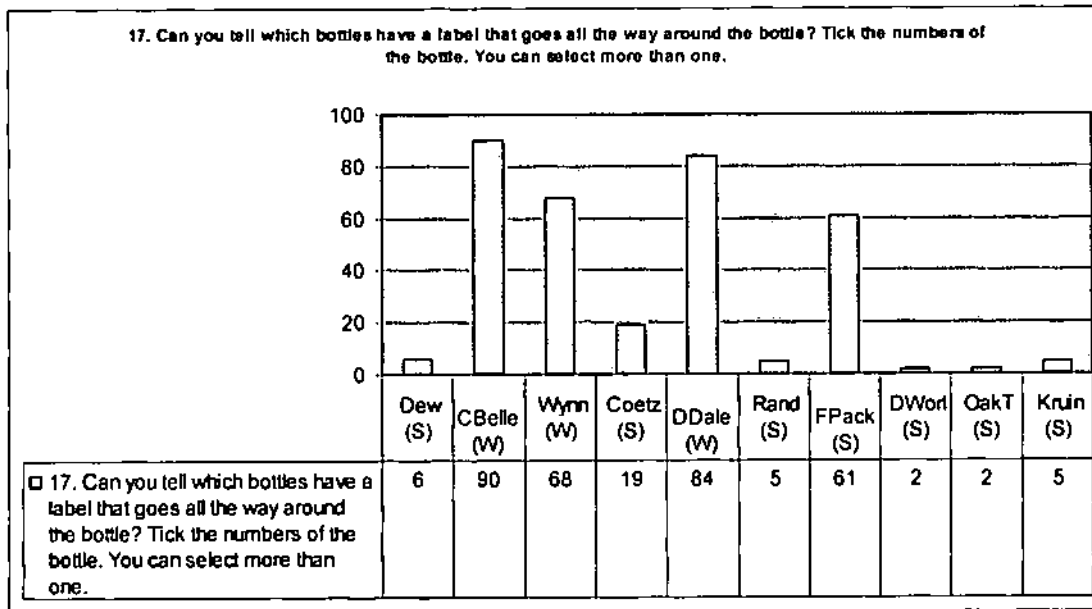


Figure 4-18 Label Type Identification

The respondents correctly identified that the ClaraBelle (87%) and the Douglasdale (82%) samples made use of a wraparound label, denoted by (W) in Figure 4-18. By comparison, only 68% successfully identified the Wynnworth sample as using a wraparound label. The lower percentage could be a result of Wynnworth's use of label that is predominantly white and thus not as easily distinguishable against the bottle.

A notably high response rate incorrectly identified the FreshPak sample as making use of a wraparound label where it in fact was an adhesive label. FreshPak make use of an adhesive label that is horizontally longer than normal sticker labels which covers the front panel and extends to a section of each side panel. In the simulation setting, it is not clear that the bottle does not use the wraparound as the consumer would normally only be able to see the front panels of the bottles.

4.4.2 Buyer preference of Label Type

Respondents were asked as to their preference between the wraparound label and the adhesive label as a label type. As the wraparound label has a greater area for design use of colours, brand and pictures, coupled with the high aesthetically pleasing finish, it was assumed to be the preferred choice by respondents. Adhesive labels are by far limited in its use when compared to the wraparound and are seen to be an ageing or “cheap” option.

Buyer Preference of Label Type

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Wraparound Label	78	75.7	75.7	75.7
	Adhesive Label	25	24.3	24.3	100.0
	Total	103	100.0	100.0	

Table 4-24 Buyer Preference of Label Type

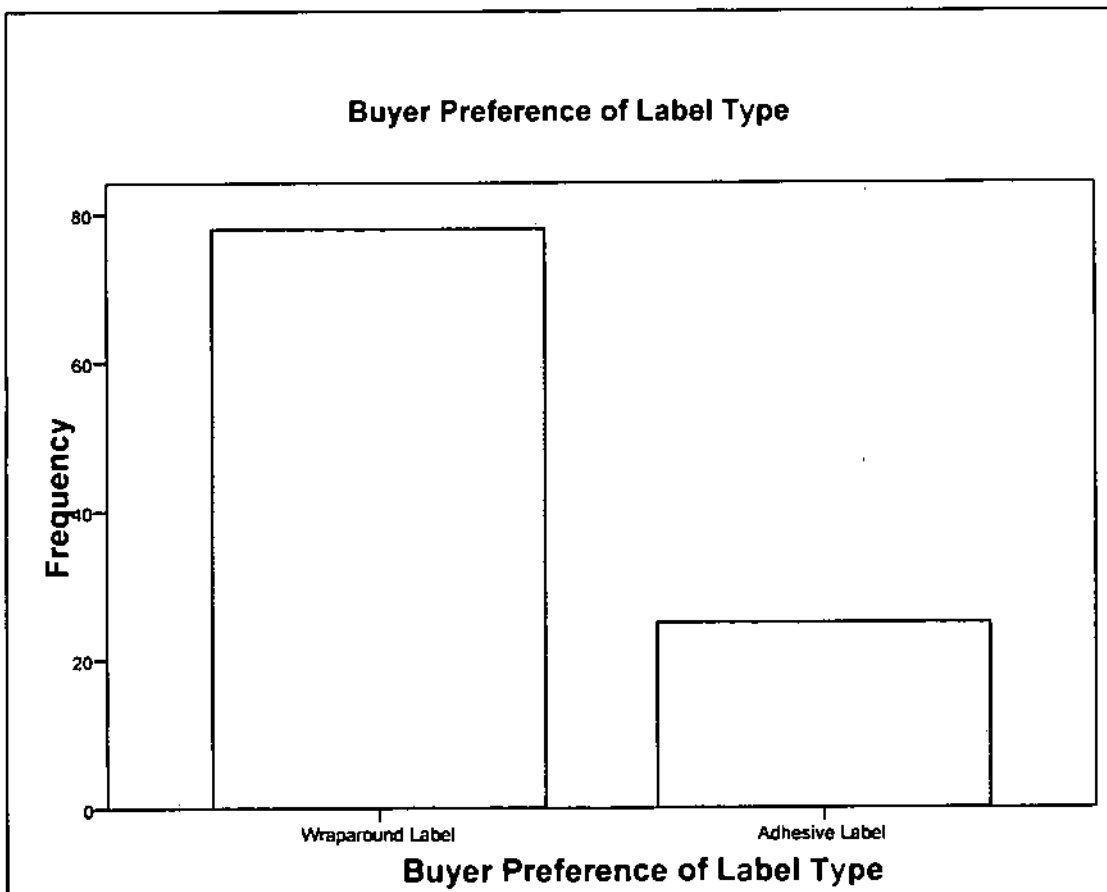


Figure 4-19 Buyer Preference of Label Type

The wraparound was preferred by the respondents with 75,7% selecting it over the adhesive alternate (24,3%).

4.4.3 Visual Stimuli First Noticed

The key visual stimuli elements used on label design include the use of colour, image, logo and font type. The greater portion of a label would be covered by the picture and colours used on the whole. To establish which element had the greater impact, respondents were asked as whether they first notice the picture used on the label or the colour used on the label.

Visual Stimuli First Noticed					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Colour	18	17.5	17.6	17.6
	Picture	84	81.6	82.4	100.0
	Total	102	99.0	100.0	
Missing	System	1	1.0		
Total		103	100.0		

Table 4-25 Visual Stimuli First Noticed

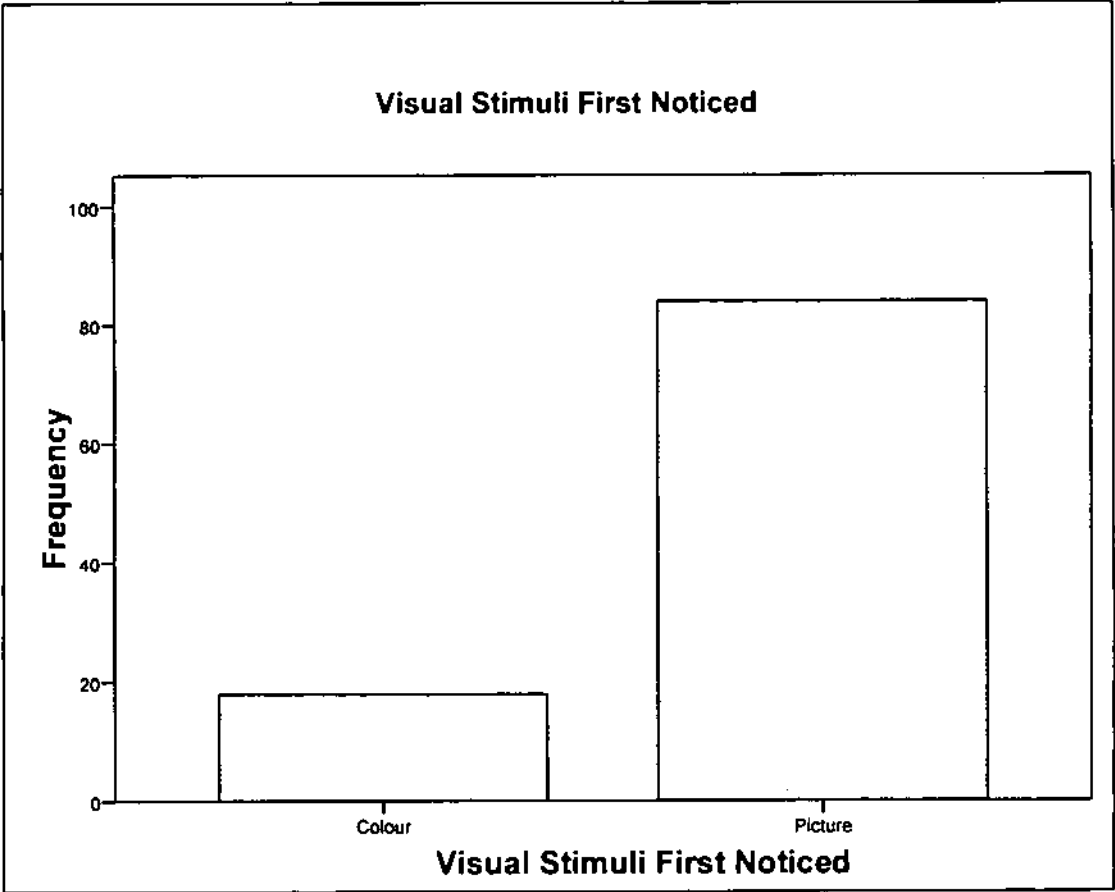


Figure 4-20 Visual Stimuli First Noticed

The picture was the visual stimuli element first noticed by the respondents surveyed with 82,4% indicating such. 17,5% indicated that colour was the first element noticed.

4.4.4 Wraparound Label effect on Quality Perception

The greater area for design use of colours, brand and pictures of the wraparound label, coupled with the high aesthetically pleasing finish, serves to create the perception that milk that is packaged in a bottle using a wraparound label has an improved quality appearance, and thus that the product contained therein is of a superior quality than that milk contained in the traditional clear bottle.

Wraparound Label effect on Quality Perception

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	70	68.0	68.6	68.6
	No	32	31.1	31.4	100.0
	Total	102	99.0	100.0	
Missing	System	1	1.0		
Total		103	100.0		

Table 4-26 Wraparound Label effect on Quality Perception

68,6% of the respondents surveyed perceived that milk packaged in a bottle making use of a wraparound label was of a higher quality. 31,4% did not perceive the wraparound label to indicate a higher quality product.

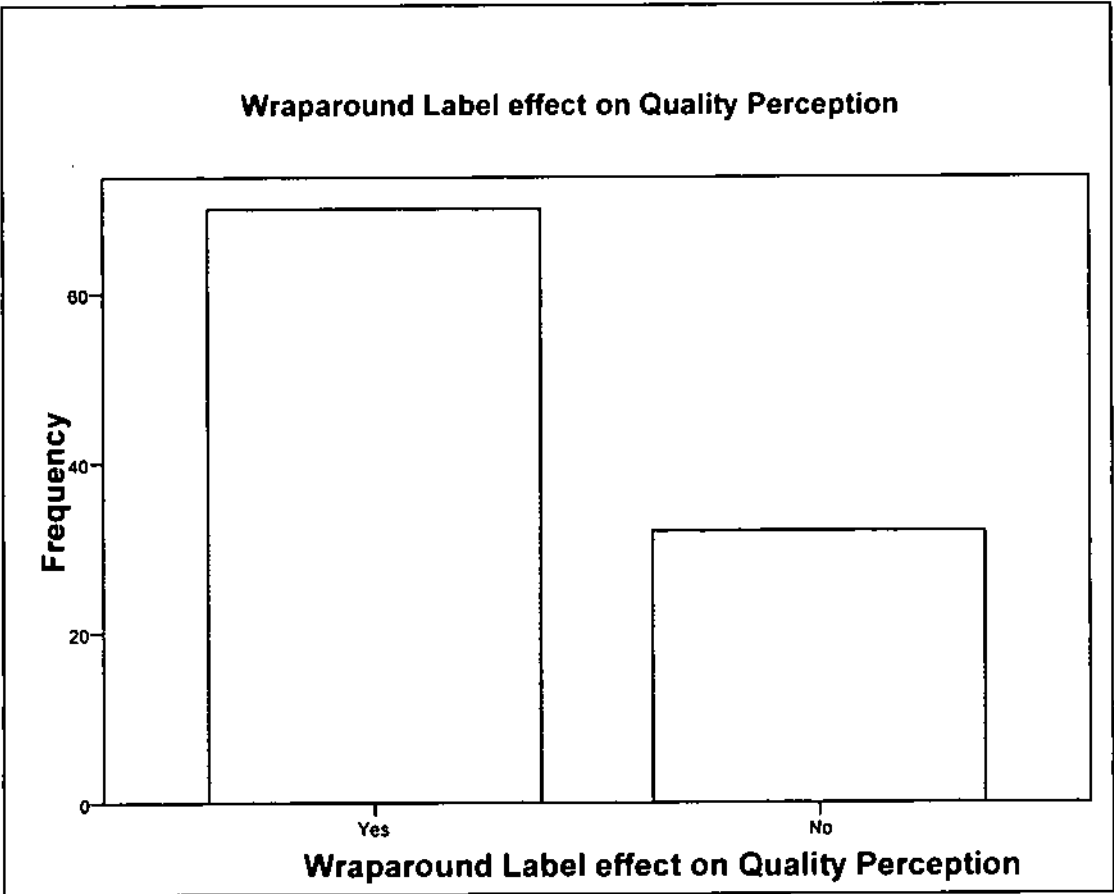


Figure 4-21 Wraparound Label effect on Quality Perception

4.4.5 Wraparound Label Price Premium

The higher aesthetic appeal of the wraparound label increases the overall appeal of the product; however it is notable that the use of this label as opposed to the adhesive label is at an increased cost. It is assumed that the price premium that the wraparound label can command outweighs this label cost increase. Through the survey, respondents were asked whether they would in fact be willing to pay a premium for milk.

Wraparound Label Price Premium					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	64	62.1	62.1	62.1
	No	39	37.9	37.9	100.0
	Total	103	100.0	100.0	

Table 4-27 Wraparound Label Price Premium

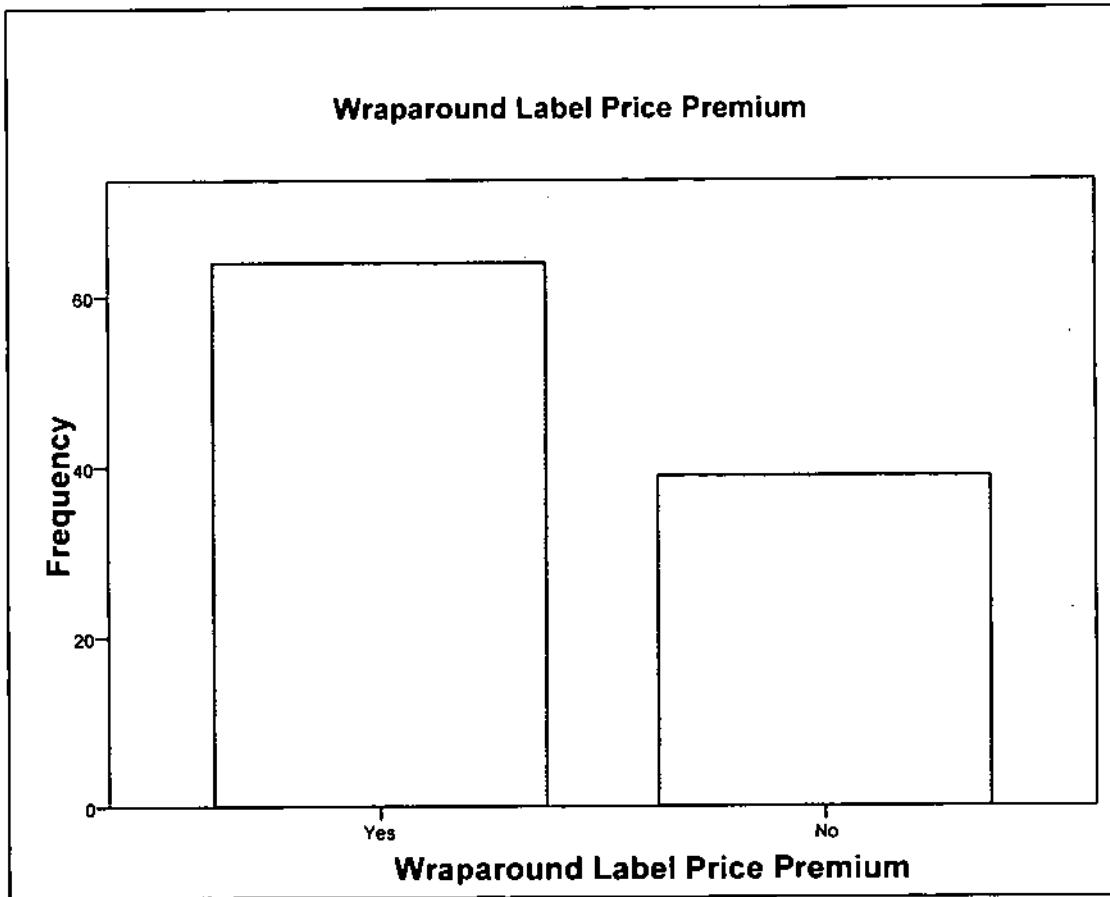


Figure 4-22 Wraparound Label Price Premium

The respondents surveyed indicated that 62,1% would be willing to pay a premium for milk packaged in a bottle that made use of a wraparound label. 37,9% were not willing to pay a premium for the wraparound label.

4.5 Section 5: Brand

This section in the survey was designed to extract information as to the role the brand plays in the choice preference of the consumer. Milk, being a commodity product, has little opportunity for differentiation. Brand can play an important role in quality perception and a brand that does not disappoint the consumer can lead to habitual loyalty and trust.

4.5.1 Brand Importance

Respondents were asked to indicate the importance of the brand of the milk when making a purchase. With many brands of milk available to the consumer, this question in the survey was designed to identify how the consumer considers brand in the purchase decision.

Brand Importance					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	77	74.8	74.8	74.8
	No	26	25.2	25.2	100.0
	Total	103	100.0	100.0	

Table 4-28 Brand Importance

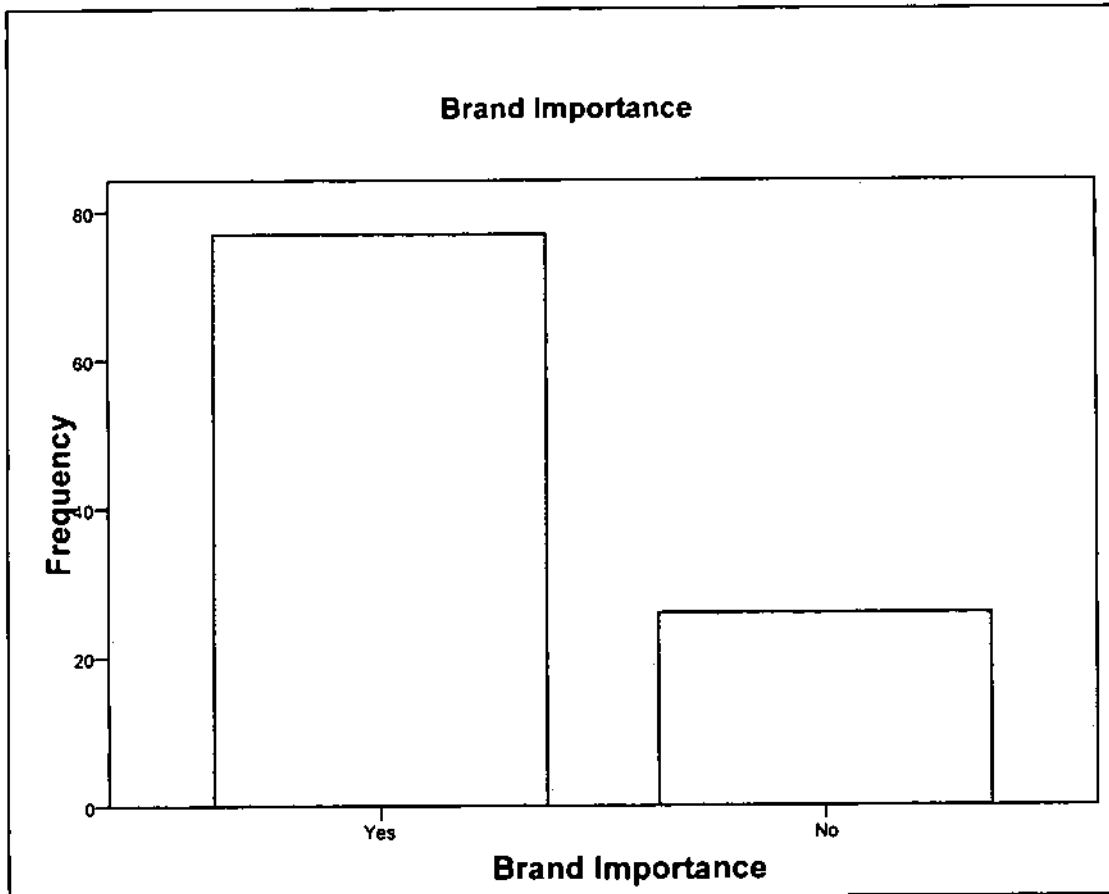


Figure 4-23 Brand Importance

The importance of the brand was confirmed by 74,8% of the respondents surveyed with 25,2% indicating that brand was not important.

4.5.2 Brand Loyalty

A brand that does not disappoint its consumers helps to build a positive image with that consumer and can lead to habitual loyalty toward the brand. Respondents were surveyed as to whether they remain loyal to a brand that they know and trust.

		Brand Loyalty			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	65	63.1	63.7	63.7
	No	37	35.9	36.3	100.0
	Total	102	99.0	100.0	
Missing	System	1	1.0		
Total		103	100.0		

Table 4-29 Brand Loyalty

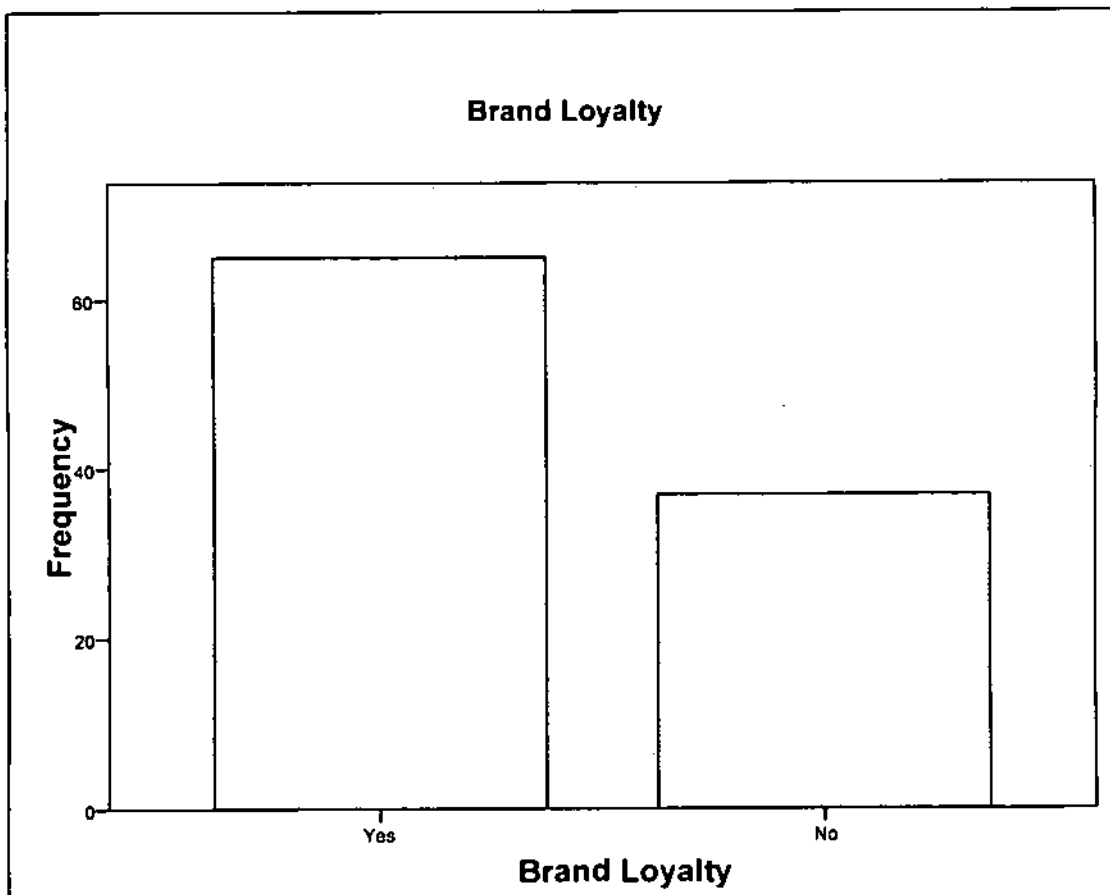


Figure 4-24 Brand Loyalty

63,7% of respondents confirmed that they will continue to buy a brand that

they know and trust. 36,3% responded that they did not necessarily stick to the brand of milk they trusted.

4.5.3 Brand Awareness

Respondent's awareness of brands in the fresh milk market was surveyed by asking respondents if they looked for another familiar brand of milk if the brand they were normally loyal to was not available.

Brand Awareness					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	62	60.2	61.4	61.4
	No	39	37.9	38.6	100.0
	Total	101	98.1	100.0	
Missing	System	2	1.9		
Total		103	100.0		

Table 4-30 Brand Awareness

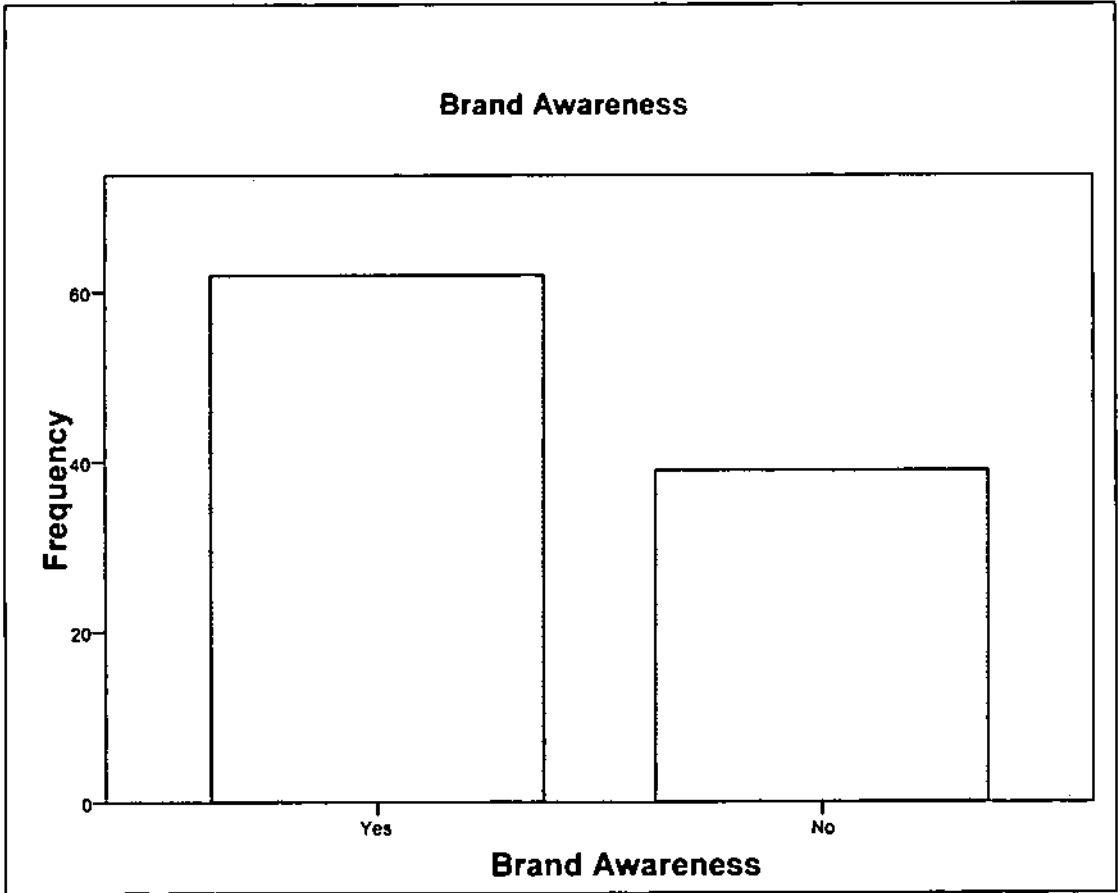


Figure 4-25 Brand Awareness

Another familiar brand was sought if their usual brand was not available by 61,4% of the respondents surveyed. 38,6% of respondents surveyed indicated that they did not look for another familiar brand.

4.5.4 Brand Switching

Habitual loyalty of the consumer can be lost if their familiar brand is not available at the purchase decision or if the brand fails to deliver to consumer expectation. A consumer switching to a new or unfamiliar brand that meets expectations leading to habitual loyalty can be lost to their usual brand indefinitely. Respondents were surveyed as to their willingness to select an unfamiliar brand name in no brand they were aware of was available.

Brand Switching					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	53	51.5	52.0	52.0
	No	49	47.6	48.0	100.0
	Total	102	99.0	100.0	
Missing	System	1	1.0		
Total		103	100.0		

Table 4-31 Brand Switching

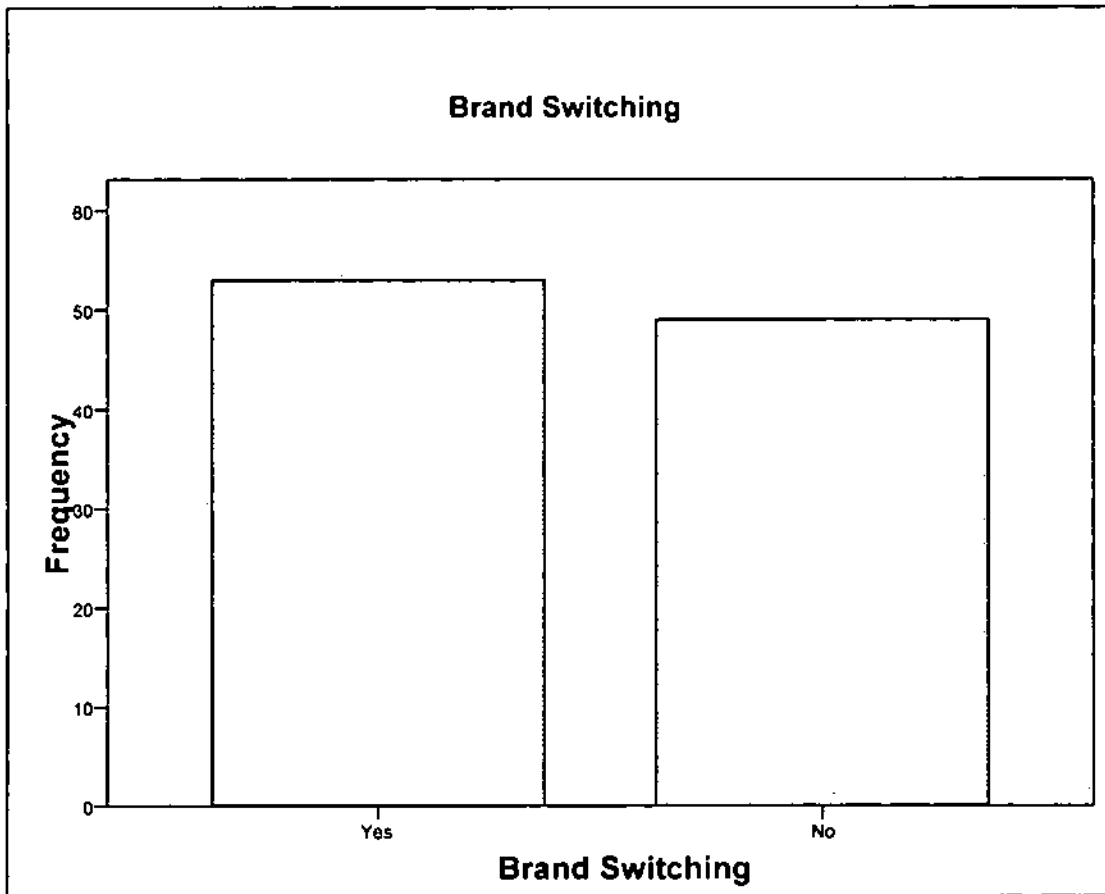


Figure 4-26 Brand Switching

Of the respondents surveyed, 52% indicated they would be willing to purchase an unfamiliar brand name if brands they were aware of were not available. 48% indicated they would not be willing to make the switch to an unfamiliar brand.

4.5.5 Brand Price Premium

A familiar brand to a consumer can be fortified through building trust and meeting consumer expectations. As brand loyalty or habitual loyalty leads to repeat purchases, so the brand trust of the consumer is strengthened. A trusted brand is perceived to be of a minimum standard quality and consistently meets consumer expectation. Respondents were asked if they would be willing to pay more for a familiar brand name to establish whether a brand could in fact command a premium.

Brand Price Premium					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	67	65.0	65.7	65.7
	No	35	34.0	34.3	100.0
	Total	102	99.0	100.0	
Missing	System	1	1.0		
Total		103	100.0		

Table 4-32 Brand Price Premium

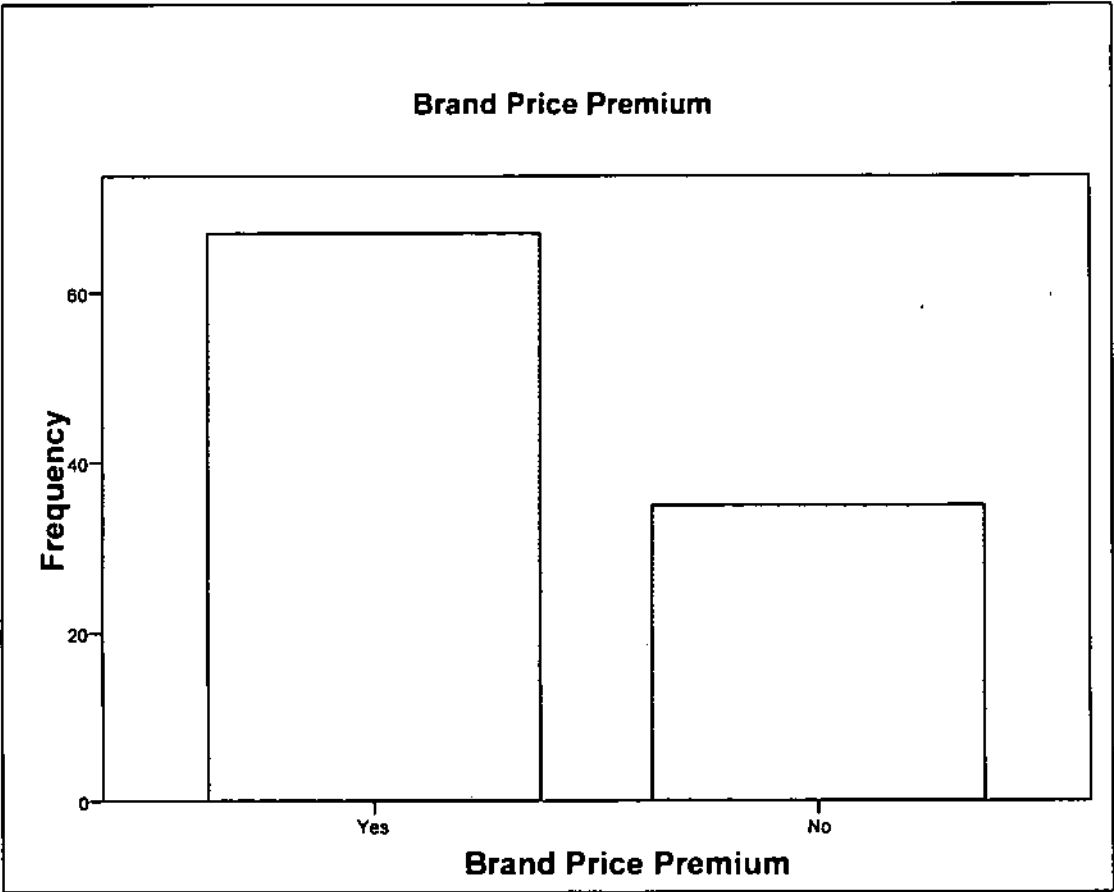


Figure 4-27 Brand Price Premium

65.7% of respondents surveyed indicated that they were willing to pay a premium when purchasing familiar brand name milk. 34,3% of respondents indicated they would not be willing to pay a premium for a familiar brand.

4.5.6 Price versus Brand

The level of brand importance to the consumer was gauged against the importance of price of the milk to the consumers. In the LSM 1 to 4 categories,

access to disposable income is limited for individuals. Taking this factor into consideration, respondents were surveyed as to which element of the product was more important, brand or price.

Price versus Brand					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	76	73.8	73.8	73.8
	No	27	26.2	26.2	100.0
	Total	103	100.0	100.0	

Table 4-33 Price versus Brand

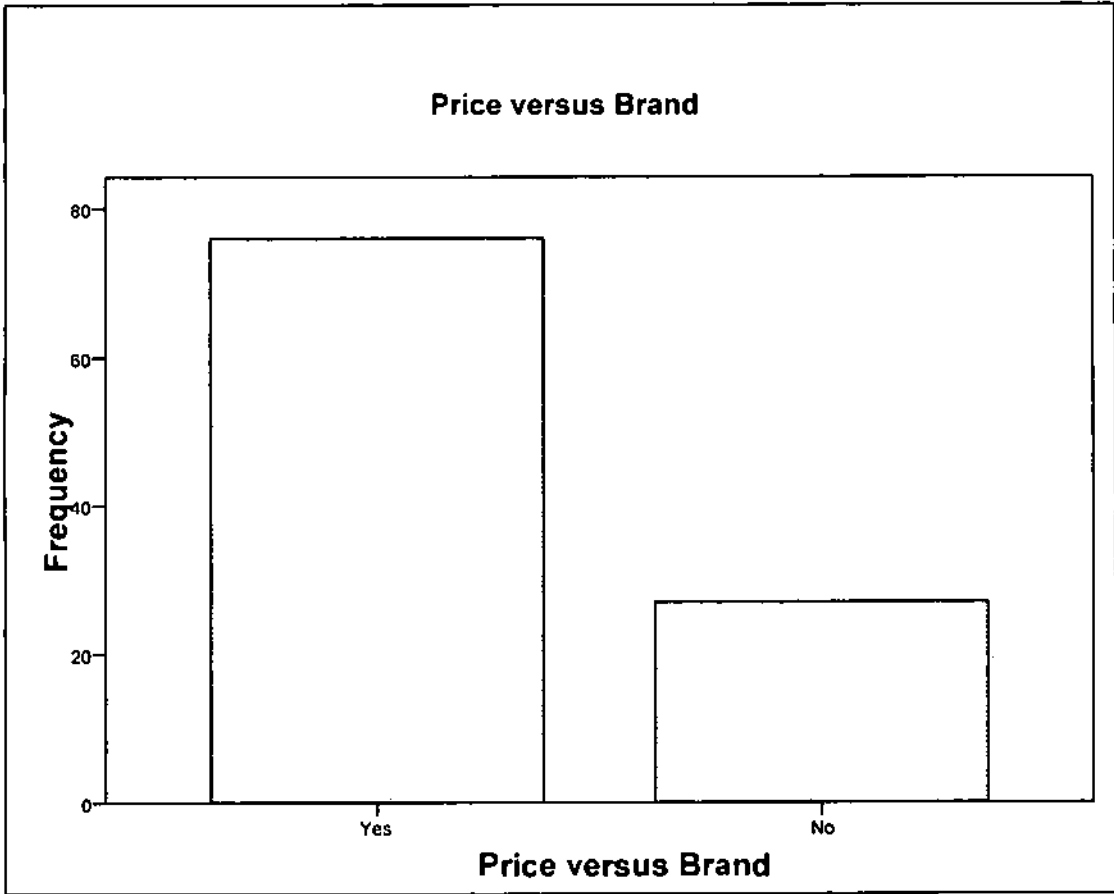


Figure 4-28 Price versus Brand

Price was more important than brand to 73,8% of the respondents surveyed with 26,6% indicating that price was not important than the brand when purchasing milk.

4.5.7 Travelling to Buy a Familiar Brand

Contributing to brand loyalty assessment, respondents were asked if they were willing to travel further to purchase milk they were familiar with. Milk being a commodity product, with few differentiating characteristics between brands, requires that familiar brands need to be readily and conveniently available.

Travel to Buy Brand					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	29	28.2	28.2	28.2
	No	74	71.8	71.8	100.0
	Total	103	100.0	100.0	

Table 4-34 Travel to Buy Brand

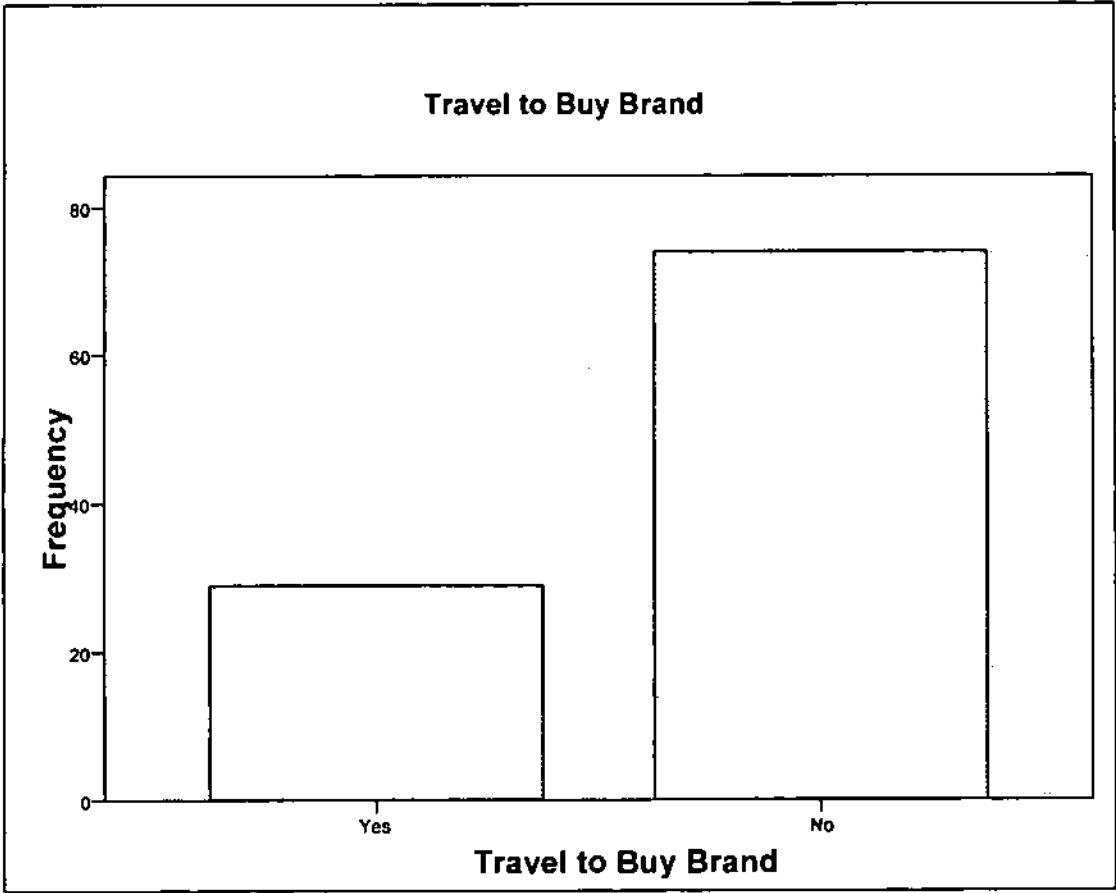


Figure 4-29 Travel to Buy Brand

Willingness to travel further than a location of convenience to purchase familiar brand milk was confirmed by 28,2% of respondents surveyed. 71,8%

of respondents indicated that they would not be willing to travel further for brands they were familiar with.

4.5.8 Brand effect on Quality Perception

As consumers in LSM 1 to 4 have low levels of disposable income, quality failure of a product can be costly to consumers at these levels. Brand awareness is an important mechanism in the purchase decision when quality of the product is being assessed. Respondents were asked if a well-known brand was a signal for a high level of quality for the product.

Brand effect on Quality Perception

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	90	87.4	89.1	89.1
	No	11	10.7	10.9	100.0
	Total	101	98.1	100.0	
Missing	System	2	1.9		
Total		103	100.0		

Table 4-35 Brand Effect on Quality Perception

A familiar brand was perceived to be a signal of good quality milk by 89,1% of respondents surveyed, whilst 10,9% did not believe a familiar brand indicated good quality of the product.

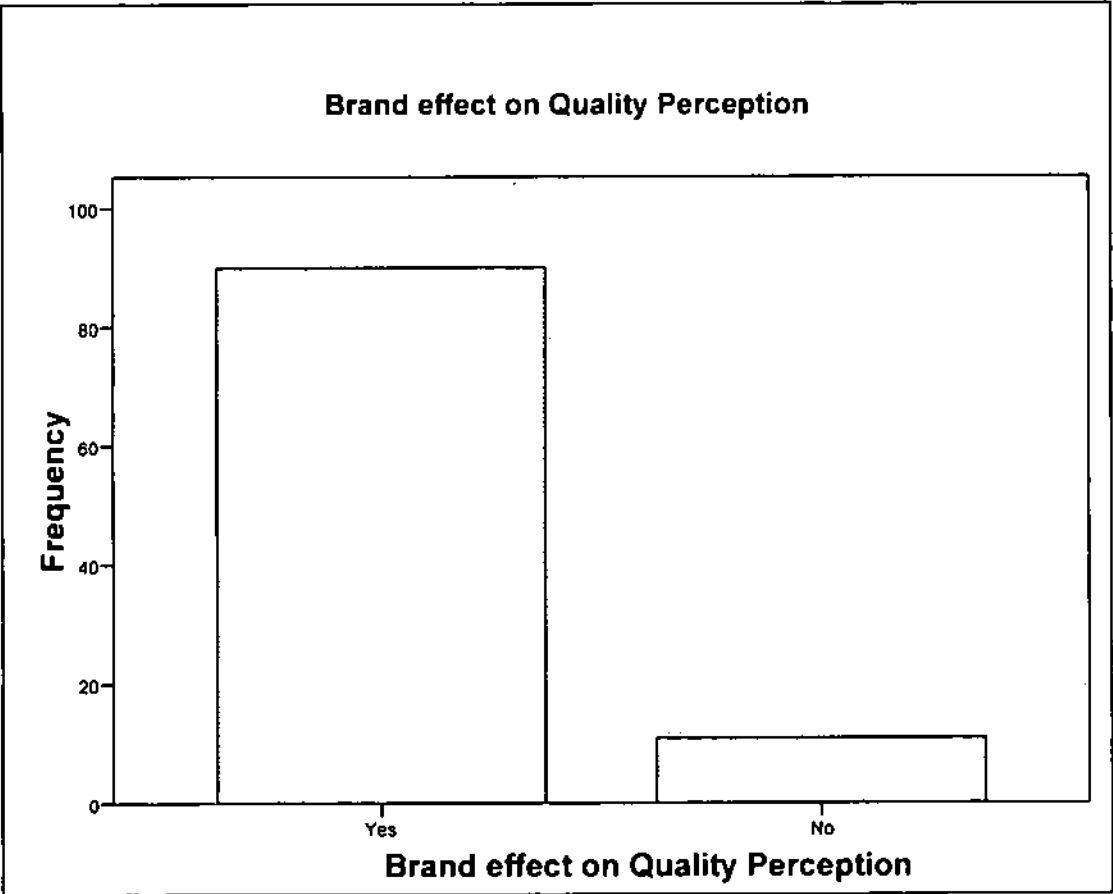


Figure 4-30 Brand Effect on Quality Perception

4.6 Section 6: Images

Images used on the packaging are incorporated on the label used on the bottle, whether it is a wraparound label or adhesive label. With fresh milk, various images are used on labels with most incorporating images of cows and dairy farm scenery. This section of the study was designed to gather information as to the image considerations in choice preference of the respondents surveyed.

4.6.1 Label Images Liked and Disliked by Consumers

Respondents were presented with the same ten sample bottles used in the milk buying scenario in section 2. Considering the images used on the packages in isolation, respondents were asked to make a selection of one

bottle that contained an image they liked and then to select the bottle with an image they disliked.

Image liked by Buyers					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dewfresh	5	4.9	5.1	5.1
	Clarabell's Dairy	35	34.0	35.7	40.8
	Wynn-with	18	17.5	18.4	59.2
	Douglasdale	12	11.7	12.2	71.4
	Rand Dairy	3	2.9	3.1	74.5
	Fresh Pak Dairy	12	11.7	12.2	86.7
	Dairy World	2	1.9	2.0	88.8
	Oak Tree Dairy	1	1.0	1.0	89.8
	Kruin Dairy	10	9.7	10.2	100.0
	Total	98	95.1	100.0	
Missing	System	5	4.9		
Total		103	100.0		

Table 4-36 Image liked by Buyers

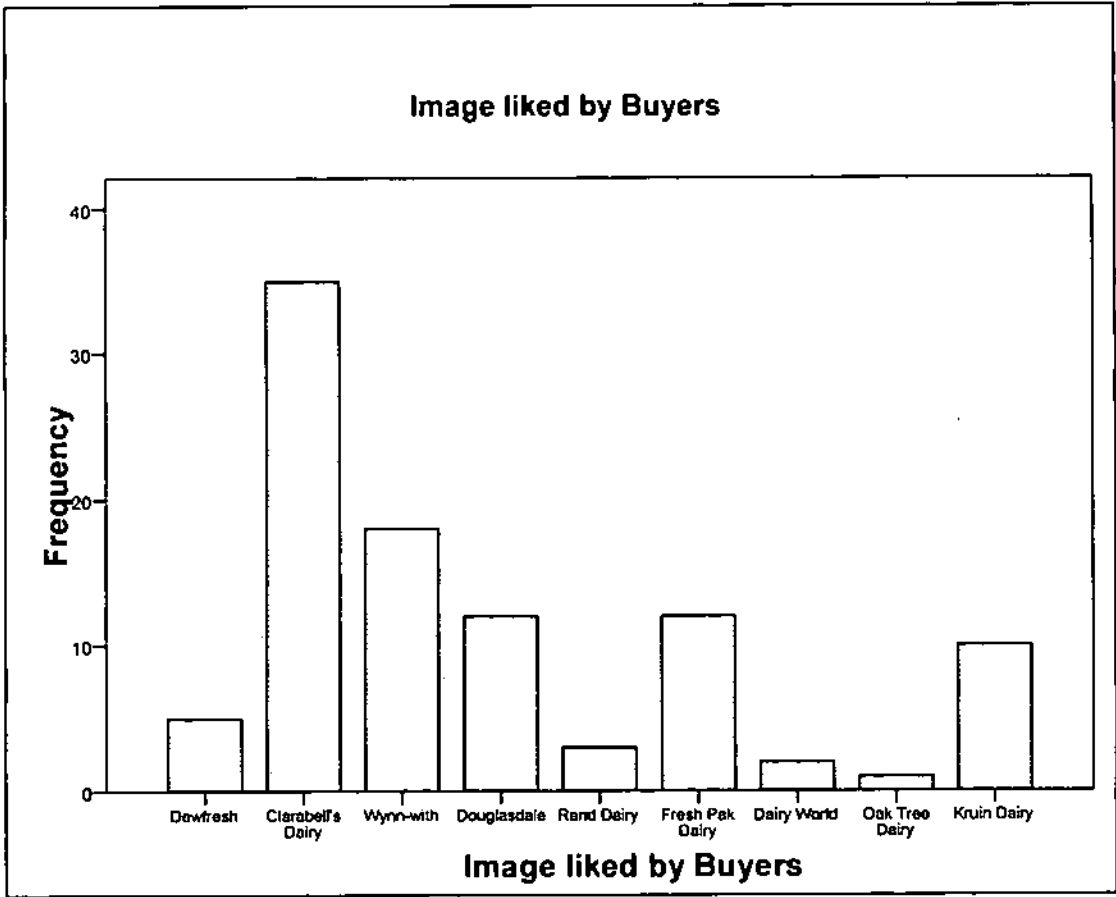


Figure 4-31 Image liked by Buyers

The image used on the Clarabell sample was liked by 35,7% of respondents

with 18,4% liking the image on the Wynn-with sample. Images on the Fresh Pak Dairy and Douglasdale samples was liked equally by 12,2% of the respondents.

Image disliked by Buyers					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dewfresh	9	8.7	9.1	9.1
	Clarabell's Dairy	6	5.8	6.1	15.2
	Wynn-with	6	5.8	6.1	21.2
	Coetzee Dairy	37	35.9	37.4	58.6
	Douglasdale	13	12.6	13.1	71.7
	Rand Dairy	8	7.8	8.1	79.8
	Fresh Pak Dairy	2	1.9	2.0	81.8
	Dairy World	4	3.9	4.0	85.9
	Oak Tree Dairy	10	9.7	10.1	96.0
	Kruin Dairy	4	3.9	4.0	100.0
	Total	99	96.1	100.0	
Missing	System	4	3.9		
Total		103	100.0		

Table 4-37 Image disliked by Buyers

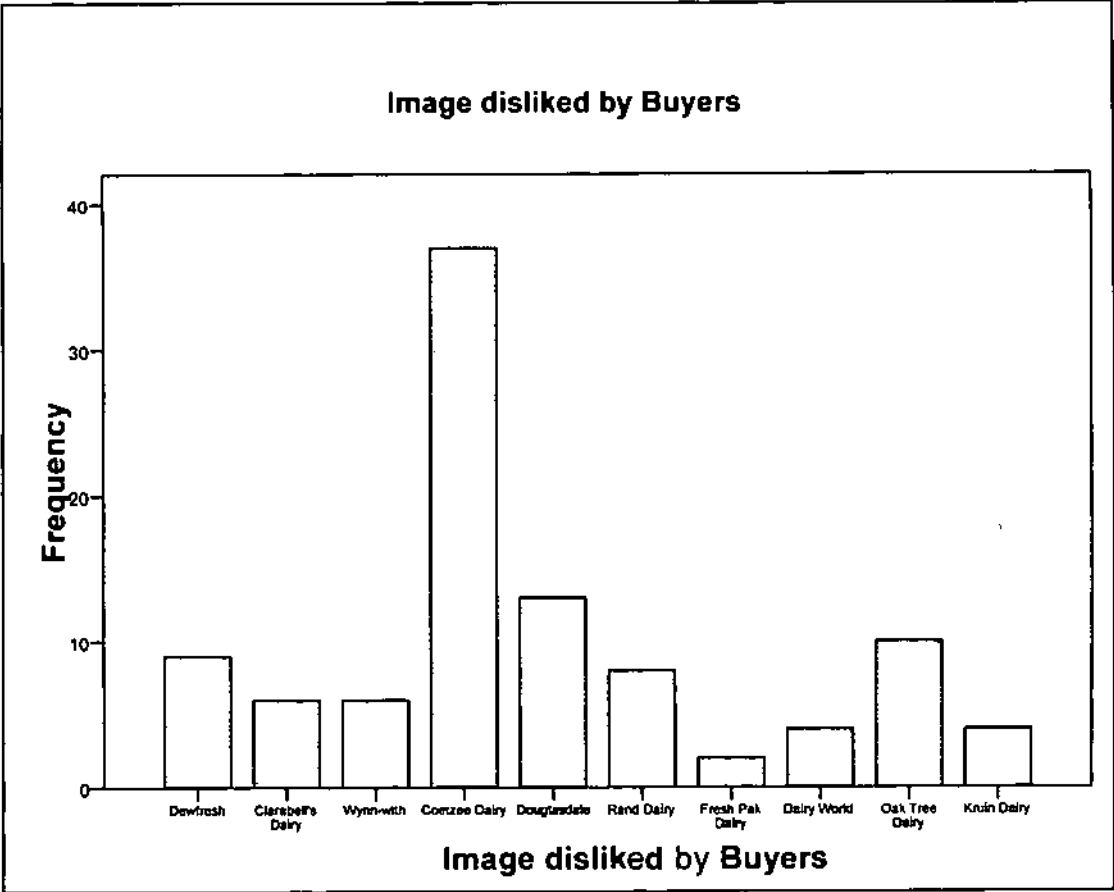


Figure 4-32 Image disliked by Buyers

The image housed on the label of the Coetzee Dairy was disliked by 37,4% of respondents and a further 13,1% disliked the image on the Douglasdale sample. The Oak Tree Dairy sample's images was disliked by 10,1% of the respondents surveyed.

4.6.2 Importance of Label Picture

Respondents were surveyed as to the importance of having a picture on the label in a situation where milk had an unfamiliar brand. The emphasis of the question was to establish the importance of visual stimuli in the absence of brand awareness in consumer choice preference.

Importance of Label Picture					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	77	74.8	74.8	74.8
	No	26	25.2	25.2	100.0
	Total	103	100.0	100.0	

Table 4-38 Importance of Label Picture

74,8% of respondents surveyed indicated that a label picture was an important factor when considering an unfamiliar brand of milk in the purchase decision. 25,2% did not believe that the label picture was significant in this scenario.

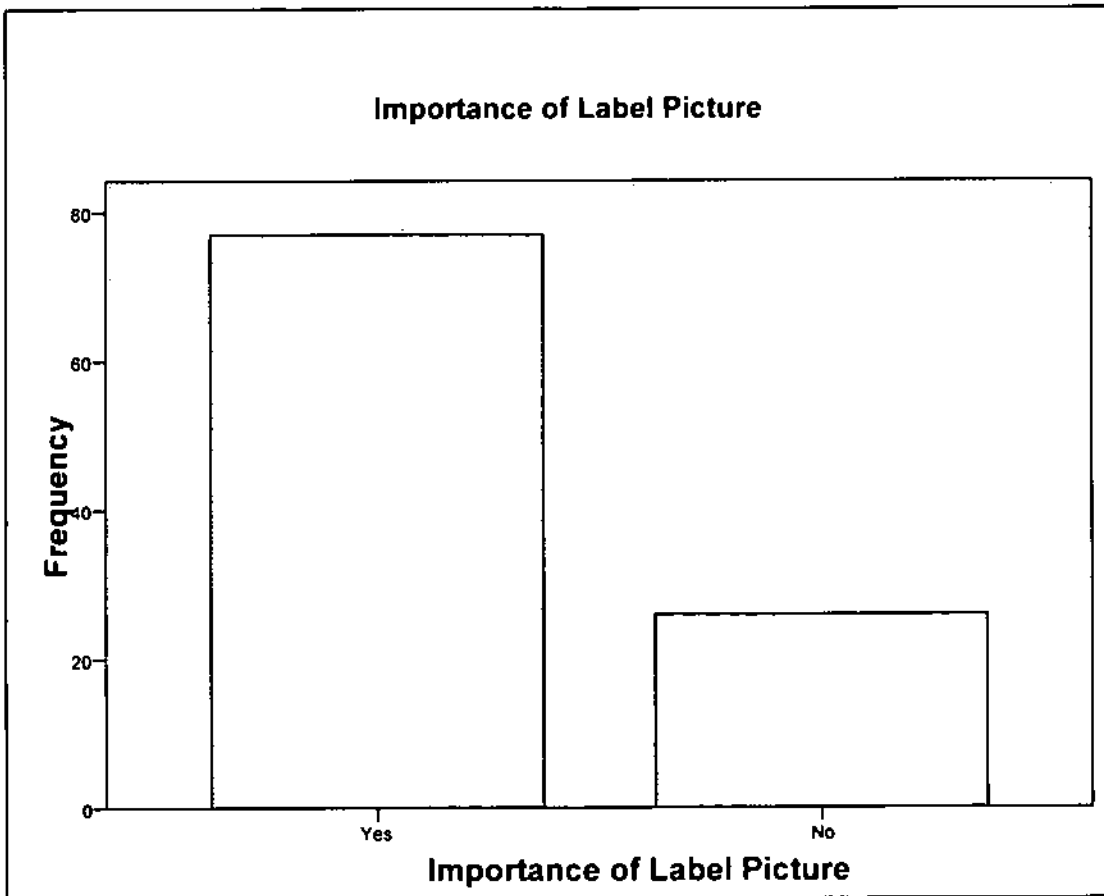


Figure 4-33 Importance of Label Pictures

4.6.3 Image of Cow as Visual Stimuli

The use of images of cows and dairy farm scenes is common place on labels used in packaging design for fresh milk. Considering lower levels of education and literacy in LSM categories 1 to 4, respondents were surveyed as to importance of the use of the image of a cow in the packaging design to communicate that a bottle contains milk.

Importance of use of Cow as Visual Stimuli

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	94	91.3	91.3	91.3
	No	9	8.7	8.7	100.0
	Total	103	100.0	100.0	

Table 4-39 Image of Cow as Visual Stimuli

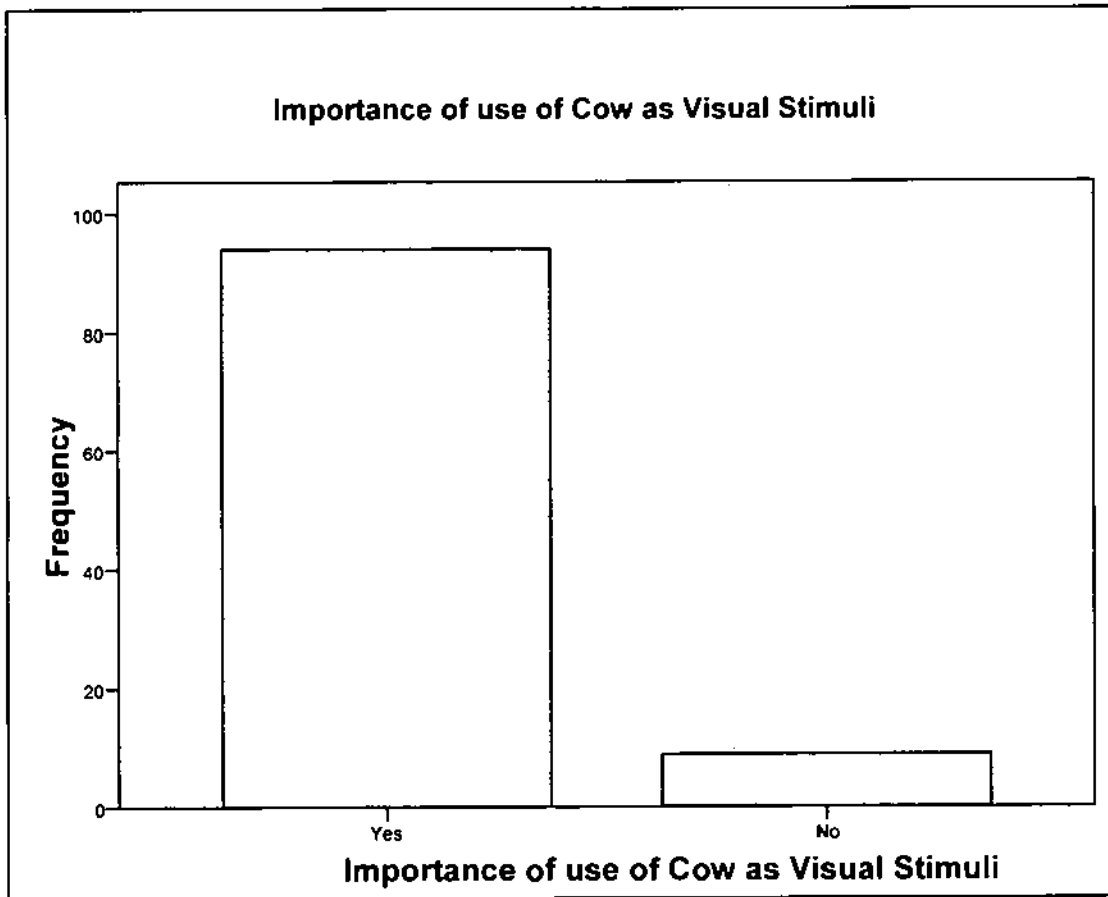


Figure 4-34 Image of Cow as Visual Stimuli

91,3% of respondents surveyed confirmed the importance of the use of the image of a cow to indicate that a bottle contained milk. 9,7% did not believe the use of the cow image to be important.

4.6.4 Buyer Preference for Image Type

The type of image used to depict cows and dairy farms scenes on labels can be defined into three categories namely, cartoon drawing, realistic drawing and photographic image. The cartoon drawing category includes images of an animated nature depicting images in a humorous or jovial level. A realistic drawing in turn depicts cows or dairy farms scenes as renditions with higher levels of detail. The third category, being a photographic image, makes use of photographs taken of cows and dairy scenes which is reproduced onto labels. Respondents were surveyed as to their preference for the type of image used.

Buyer Preference for Image Type					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cartoon drawing	7	6.8	6.9	6.9
	Realistic drawing	39	37.9	38.2	45.1
	Photographic image	56	54.4	54.9	100.0
	Total	102	99.0	100.0	
Missing	System	1	1.0		
Total		103	100.0		

Table 4-40 Buyer Preference for Image Type

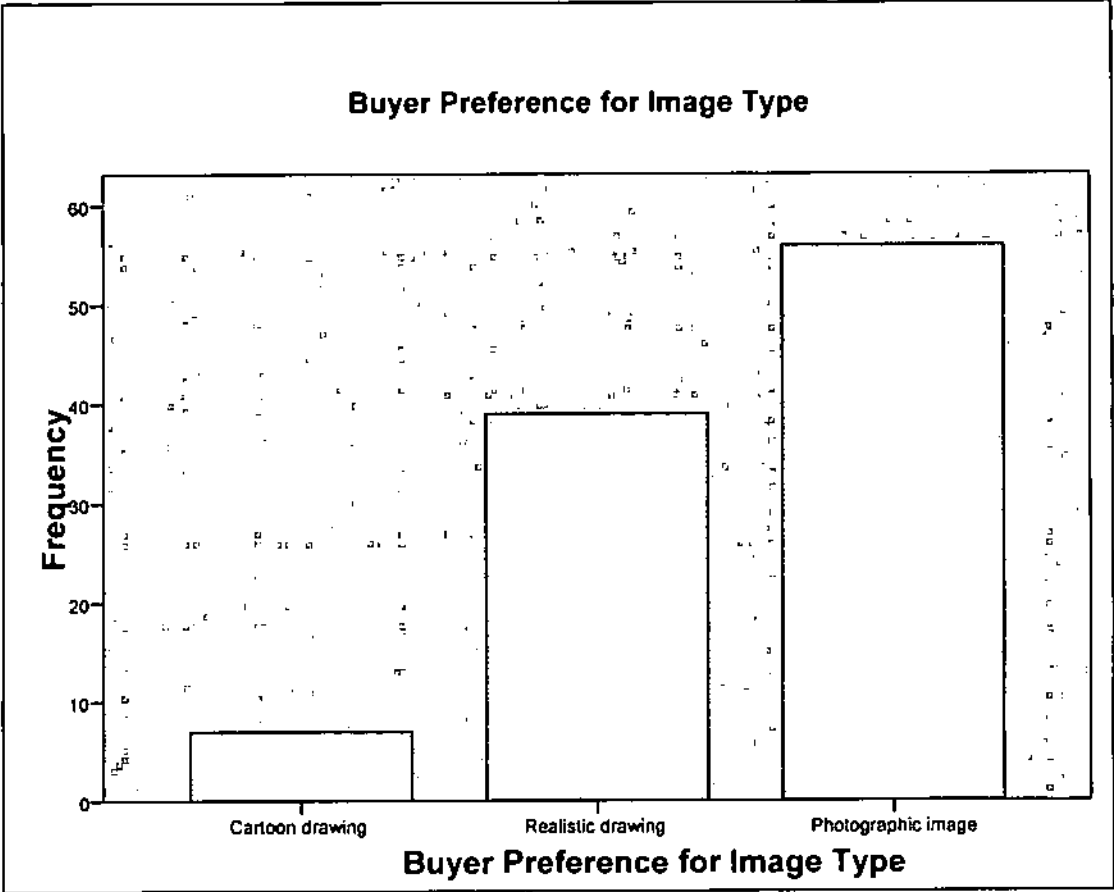


Figure 4-35 Buyer Preference for Image Type

The photographic image type was preferred by 54,9% of respondents, with 38,2% preferring the realistic drawing image type and only 6,9% preferring the cartoon drawing image type.

4.6.5 Picture Importance versus Colour

Use of colour and image on label are important elements of packaging design, and as highlighted in the literature, the label is a key area for differentiating fresh milk products. Respondents were questioned as to which of the two elements, image or colour, were the more important when considering the label on a fresh milk bottle.

Picture Importance versus Colour					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	84	81.6	81.6	81.6
	No	19	18.4	18.4	100.0
	Total	103	100.0	100.0	

Table 4-41 Picture Importance versus Colour

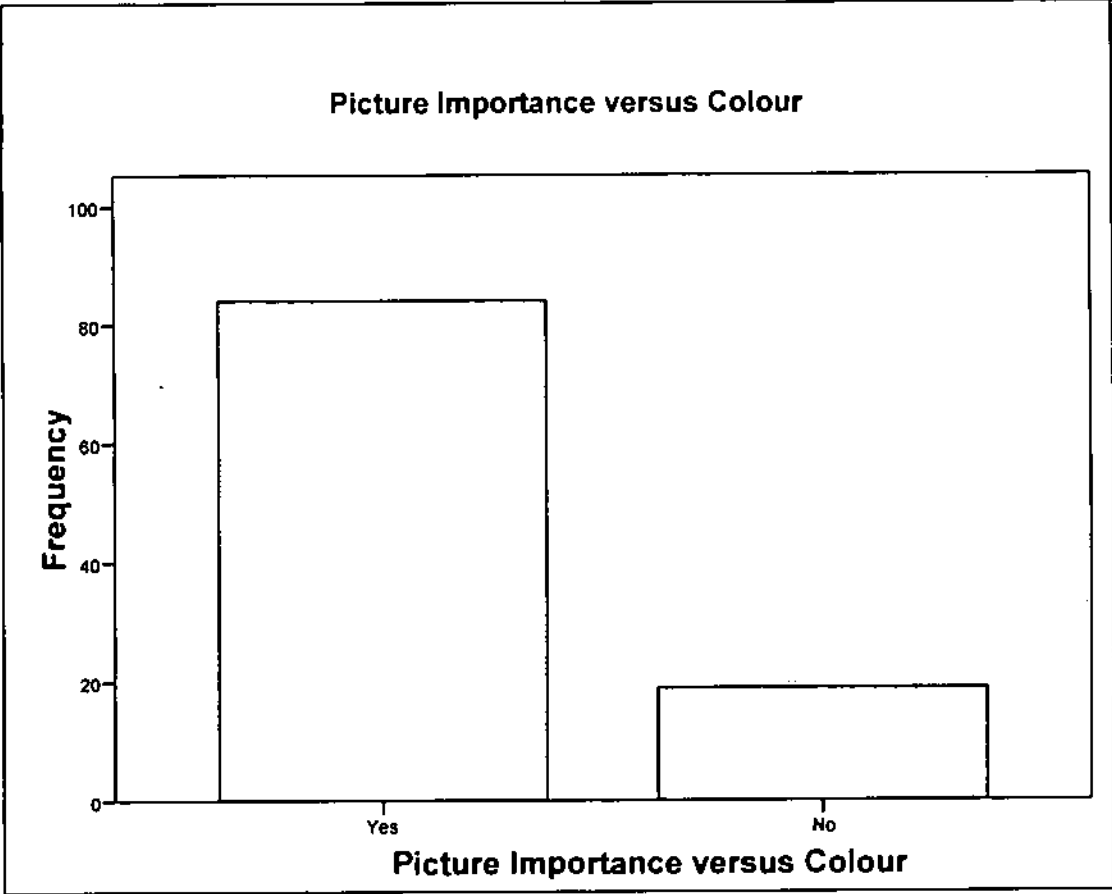


Figure 4-36 Picture Importance versus Colour

4.7 Section 7: Colour

Colour is an important visual stimulus that effectively used in packaging design can further assist a product in differentiating itself from its competition. This section of the study collected information on the effect of colours on the choice preference of the consumer.

4.7.1 Label Colours Liked and Disliked by Consumers

Respondents were presented again with the same ten sample bottles used in the milk buying scenario in section 2. Considering the colours used on the packages in isolation, respondents were asked to make a selection of one bottle that contained the colour scheme they liked most and then to select the bottle with a colour scheme they disliked.

Colour liked by Buyers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dewfresh	3	2.9	2.9	2.9
	Clarabell's Dairy	30	29.1	29.4	32.4
	Wynn-with	17	16.5	16.7	49.0
	Douglasdale	17	16.5	16.7	65.7
	Rand Dairy	4	3.9	3.9	69.6
	Fresh Pak Dairy	16	15.5	15.7	85.3
	Dairy World	2	1.9	2.0	87.3
	Oak Tree Dairy	2	1.9	2.0	89.2
	Kruin Dairy	11	10.7	10.8	100.0
	Total	102	99.0	100.0	
Missing	System	1	1.0		
Total		103	100.0		

Table 4-42 Label Colour liked by Buyers

As summarised in Table 4-42, 29,4% of respondents liked the colour scheme used on the Clarabell label. The colours used on the labels of Wynn-with and Douglasdale was like equally by 16,7% or respondents and a further 15,7% liked the colours of the Fresh Pak Dairy label.

Table 4-43 summarises the results of the labels colours disliked. 41,6% of

respondents disliked the colours used on the Coetzee Dairy label, with 13,9% and 11,9% disliking the colours used on the Dewfresh and Douglasdale label respectively.

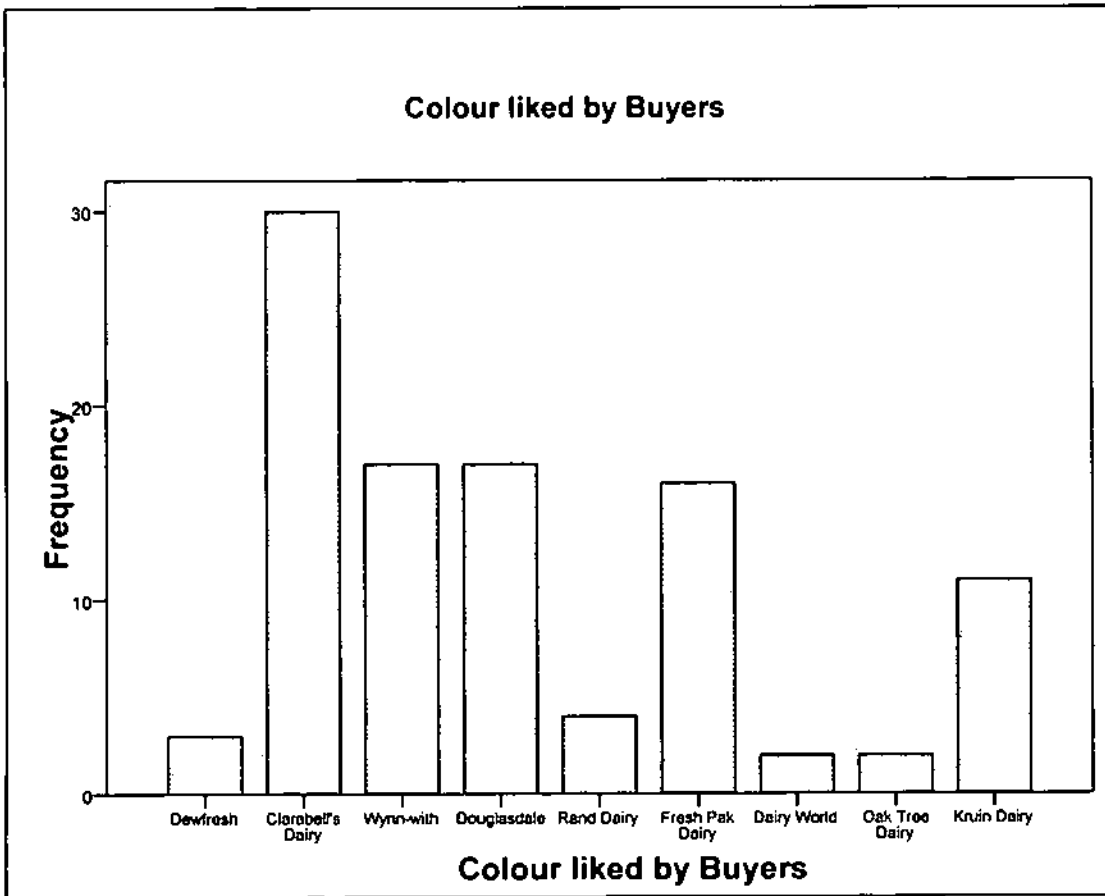


Figure 4-37 Colour Liked by Buyers

Colours disliked by Buyers

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dewfresh	14	13.6	13.9	13.9
	Clarabell's Dairy	5	4.9	5.0	18.8
	Wynn-with	2	1.9	2.0	20.8
	Coetzee Dairy	42	40.8	41.6	62.4
	Douglasdale	12	11.7	11.9	74.3
	Rand Dairy	7	6.8	6.9	81.2
	Fresh Pak Dairy	3	2.9	3.0	84.2
	Dairy World	4	3.9	4.0	88.1
	Oak Tree Dairy	8	7.8	7.9	96.0
	Kruin Dairy	4	3.9	4.0	100.0
	Total	101	98.1	100.0	
Missing	System	2	1.9		
Total		103	100.0		

Table 4-43 Colours Disliked by Buyers

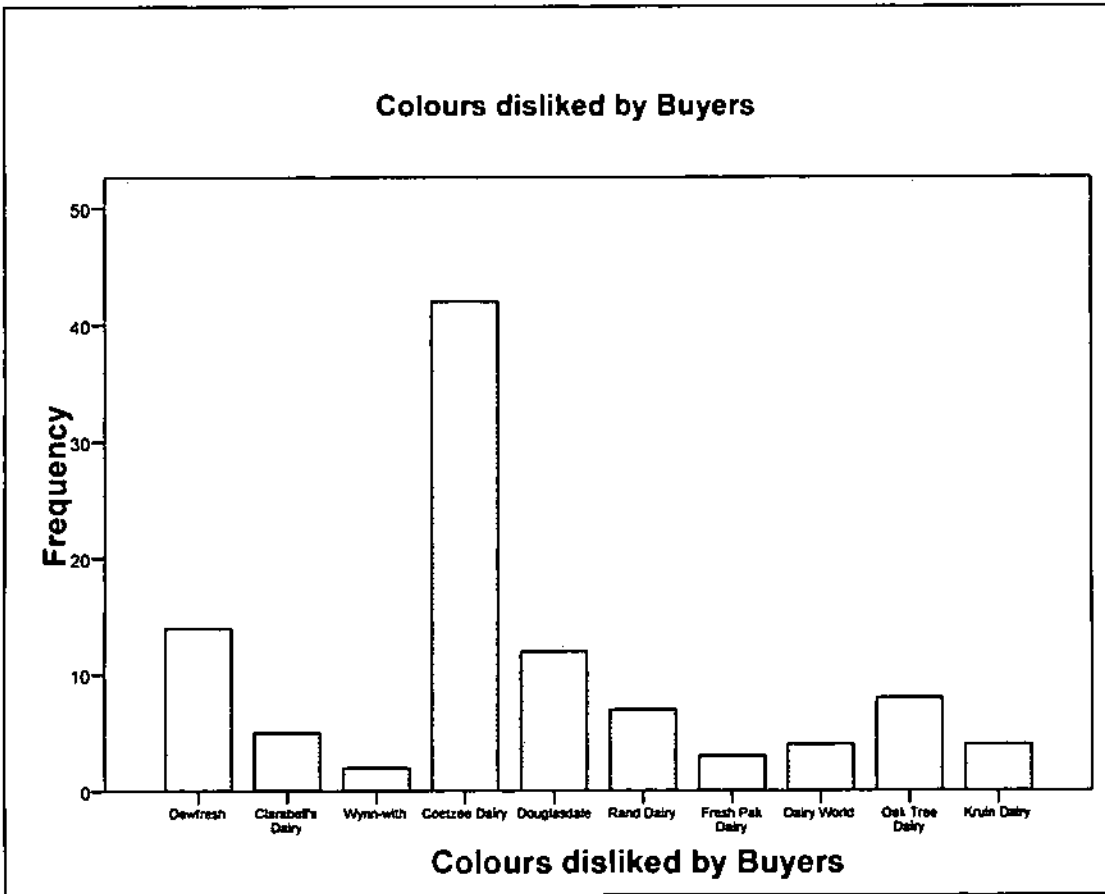


Figure 4-38 Colours Disliked by Buyers

4.7.2 Colour Importance versus Picture

In an attempt to further substantiate the importance between colour and image use on a label, respondents were asked the same question used in 4.6.5 above with elements in reverse order.

Colour Importance versus Picture

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	60	58.3	58.3	58.3
No	43	41.7	41.7	100.0
Total	103	100.0	100.0	

Table 4-44 Colour Importance versus Picture

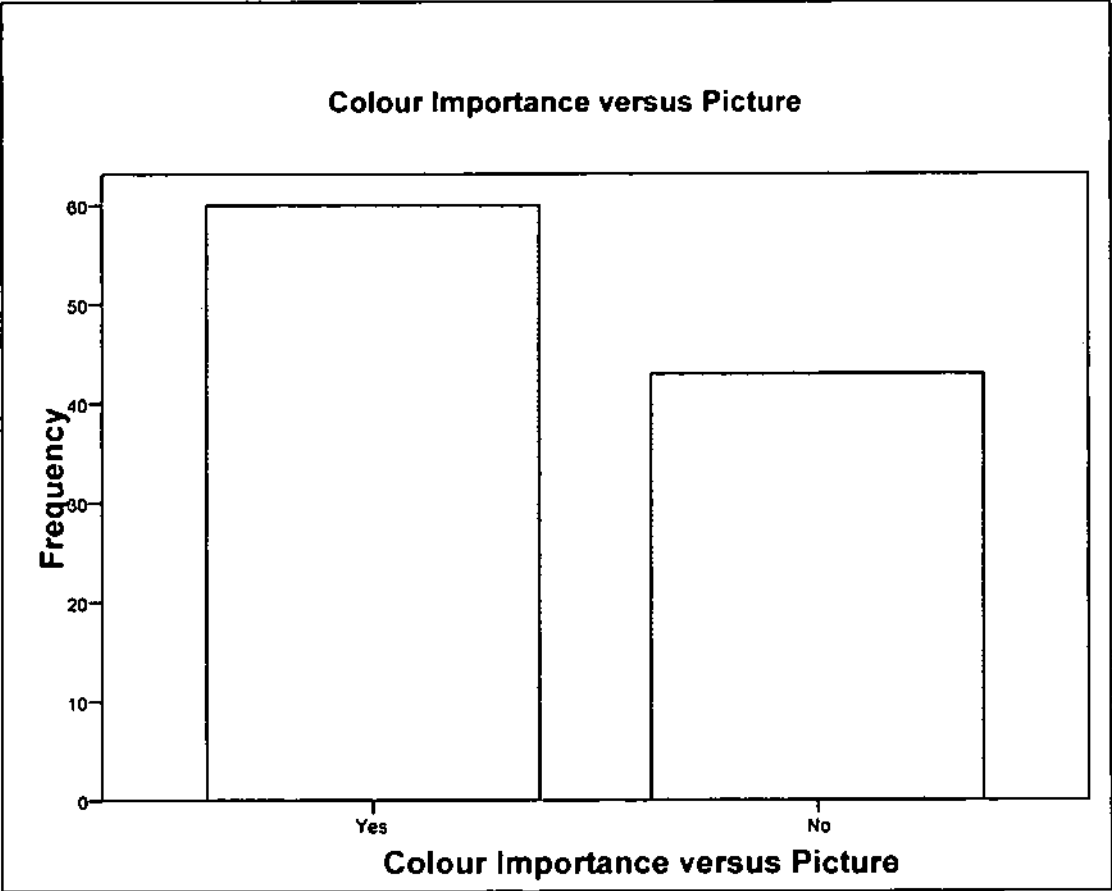


Figure 4-39 Colour Importance versus Picture

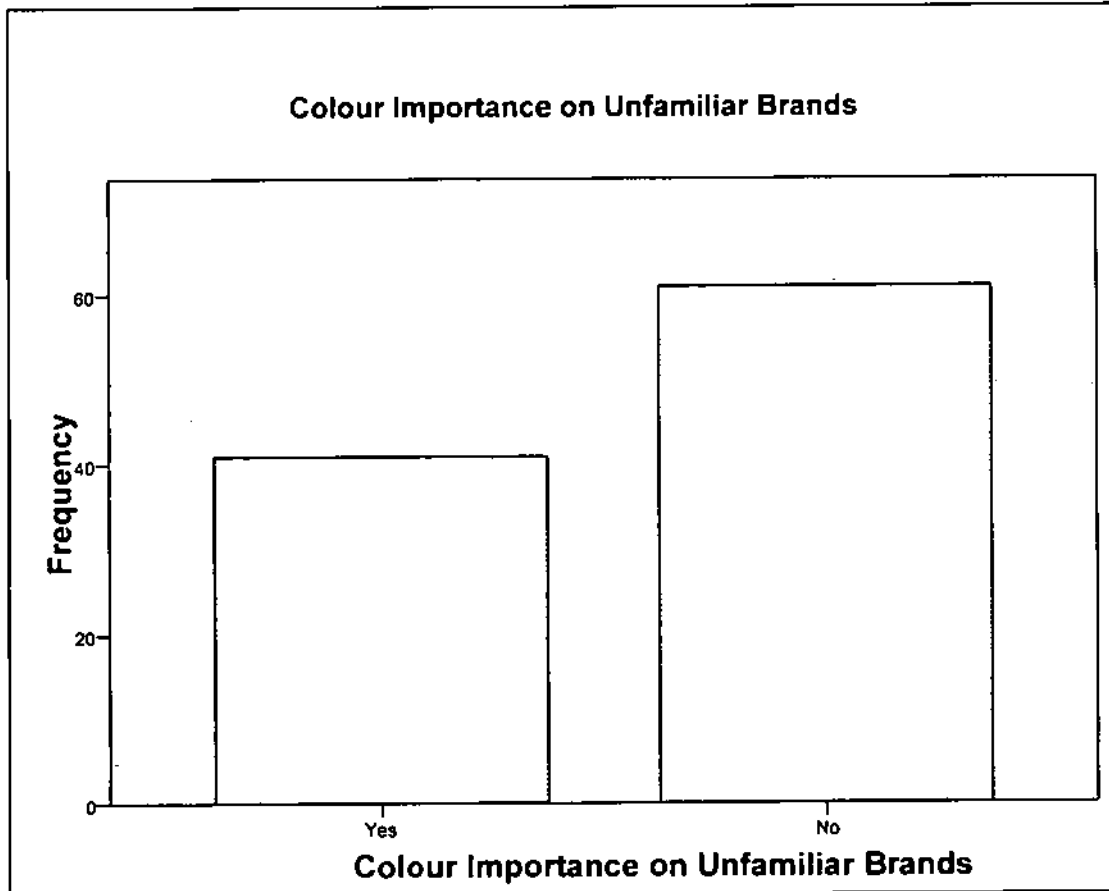
The result of this question was found not to be consistent with the results found in 4.6.5 above. In this instance, 58,3% of respondents indicated that colour was of higher importance than image on the label where only 18,4% indicated this to be the case in 4.6.5. In this instance 41,7% of respondents indicated picture was of higher importance than colour where 81,6% indicated this to be the case in 4.6.5.

4.7.3 Colour Importance on Unfamiliar Brands

The final question in the survey was to establish whether respondents believed colour to be an important consideration in choice preference when assessing unfamiliar brands.

Colour Importance on Unfamiliar Brands

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	41	39.8	40.2	40.2
	No	61	59.2	59.8	100.0
	Total	102	99.0	100.0	
Missing	System	1	1.0		
Total		103	100.0		

Table 4-45 Colour Importance on Unfamiliar Brands**Figure 4-40 Colour Importance on Unfamiliar Brands**

Colour was not considered to be important when considering an unfamiliar brand by 59,8% of respondents. The remaining 40.2% indicated that colour was an important factor in this situation.

4.8 Additional results through Crosstabulation

Crosstabulation exercises were performed on certain results obtained in previous sections. As the researcher is focusing on the buying preferences of consumers in LSM categories 1 to 4, for purposes of this study, education and income level of these consumers was reviewed further. Information was sought as to the impact that education levels and household income levels would have on the importance of visual stimuli and ability to command price premium respectively.

4.8.1 Education Levels and Visual Stimuli

Education levels in LSM categories 1 to 4 obtained in section 4.1.2 were crosstabulated with respondent's preferences in respect of visual stimuli with focus on images. Visual stimuli are a method highlighted for use in overcoming issues of illiteracy and language. The crosstabulation was prepared to obtain information as to respondent's preferences for images through the different levels of education.

Education * Buyer Preference for Image Type Crosstabulation

Count		Buyer Preference for Image Type			Total
		Cartoon drawing	Realistic drawing	Photographic image	
Education	No schooling	3	4	8	15
	Grade 1 to 9	2	20	19	41
	Grade 10 to 12 / Matric	1	13	25	39
	Post Matric Studies	0	1	3	4
Total		6	38	55	99

Table 4-46 Education compared to Image Type Preference

The respondents preference for image type e.g. cartoon drawing versus photographic image, was crosstabulated against education level attained. Respondents with education level of grade 10 to 12 indicated a preference for the photographic image. Although a limited number of results were obtained in category for no schooling, initial preference also appeared to be for the photographic image. Respondents in category Grade 1 to 9 indicated an

almost equal preference for both the realistic drawing and the photographic image.

Education * Importance of use of Cow as Visual Stimuli Crosstabulation

Count		Importance of use of Cow as Visual Stimuli		Total
		Yes	No	
Education	No schooling	15	1	16
	Grade 1 to 9	37	4	41
	Grade 10 to 12 / Matric	35	4	39
	Post Matric Studies	4	0	4
Total		91	9	100

Table 4-47 Education compared use of Imaged of Cow

The importance of an image of a cow as visual cue that a bottle contained milk was indicated to be clearly important across all levels of education. A limited number of responses were obtained for the category Post Matric Studies; however the responses obtained indicated a similar trend to the previous categories. Further data will need to be collected to confirm this similar trend.

Education * Importance of Label Picture Crosstabulation

Count		Importance of Label Picture		Total
		Yes	No	
Education	No schooling	8	8	16
	Grade 1 to 9	30	11	41
	Grade 10 to 12 / Matric	34	5	39
	Post Matric Studies	3	1	4
Total		75	25	100

Table 4-48 Education compared to Label Picture Importance

The importance of a label picture on a bottle that contained milk was indicated to be important to those respondents with education levels between Grade 1 to 9 and Grade 10 to 12. The category of no schooling had equal number of positive and negative response rate to the importance of a label picture. A limited number of responses were obtained for the category Post Matric Studies; however the responses obtained indicated a similar trend to the

Grade 1 to 9 and Grade 10 to 12 categories. Further data will need to be collected to confirm this similar trend.

4.8.2 Household income effect on Price Premium

Incorporating aesthetically pleasing elements such as a white pigmented bottle, wraparound label and building brand awareness contribute to a products ability to command a price premium from the consumer. What needs to be considered by the marketers of products is the impact of the household income level of a consumer affects the ability for this price premium to be realized. Consumers in LSM category 1 to 4 have limited disposable income levels which would need to be considered when attempting to command a price premium on products.

Responses obtained in the survey relating to household income of the sample were crosstabulated with responses obtained in respect of respondent willingness to pay premiums on certain product elements. The results of household income surveyed in section 4.1.3 indicated that 82,2% of respondents surveyed were classified in the income group R0 – R1,100. The crosstabulation results of this category provided reviewable information, however the three higher level income categories covered the remaining 17,8% of the sample and with this limited number of responses, limited meaningful inferences could have been drawn and were thus avoided.

Household Income * White Bottle Price Premium

Crosstab

Count		White Bottle Price Premium		Total
		Yes	No	
Household Income	R0 to R1,100	53	28	81
	R1,101 to R1,900	8	4	12
	R1,901 to R2,500	3	3	6
Total		64	35	99

Table 4-49 Income compared to Bottle Price Premium

Comparing household income to respondent willingness to pay a premium for milk packaged in a white pigmented bottle, 53 of 81 respondents in the R0 to R1,100 income category indicated willingness to pay a price premium. This represented 65,4% of the respondents in the category. A limited number of responses were obtained for the higher income categories and as such no meaningful data could be derived without further data collection.

Household Income * Wraparound Label Price Premium

Crosstab

Count		Wraparound Label Price Premium		Total
		Yes	No	
Household Income	R0 to R1,100	50	33	83
	R1,101 to R1,900	7	5	12
	R1,901 to R2,500	6	0	6
Total		63	38	101

Table 4-50 Income compared to Label Price Premium

Comparing household income to respondent willingness to pay a premium for milk packaged in a bottle using a wraparound label, 50 of 83 respondents in the R0 to R1,100 income category indicated willingness to pay a price premium. This represented 60,2% of the respondents in the category. A limited number of responses were obtained for the higher income categories and as such no meaningful data could be derived without further data collection.

Household Income * Brand Price Premium

Crosstab

Count		Brand Price Premium		Total
		Yes	No	
Household Income	R0 to R1,100	55	27	82
	R1,101 to R1,900	6	6	12
	R1,901 to R2,500	5	1	6
Total		66	34	100

Table 4-51 Income compared to Brand Price Premium

Comparing household income to respondent willingness to pay a premium for a familiar brand of milk, 55 of 82 respondents in the R0 to R1,100 income category indicated willingness to pay a price premium. This represented 67,1% of the respondents in the category. A limited number of responses were obtained for the higher income categories and as such no meaningful data could be derived without further data collection.

4.9 *Summary*

The data collected through the survey was analysed and the results presented. A brief introduction was provided with each area surveyed followed by results presented in tabular and graphical formats. A brief overview of the results was presented by the researcher to conclude each of the sections. Inferences and trends obtained from the results will be discussed in chapter six.

5 Chapter Five: Discussion and Conclusions

In this chapter, the researcher discusses the results obtained in the previous chapter having looked for inferences and interpretations that could be derived and then compared such to the existing literature. The discussion is followed by the conclusions that were drawn from the study and future areas of possible research are proposed. Figure 5-1 provides a structural overview to the discussion and conclusion chapter.

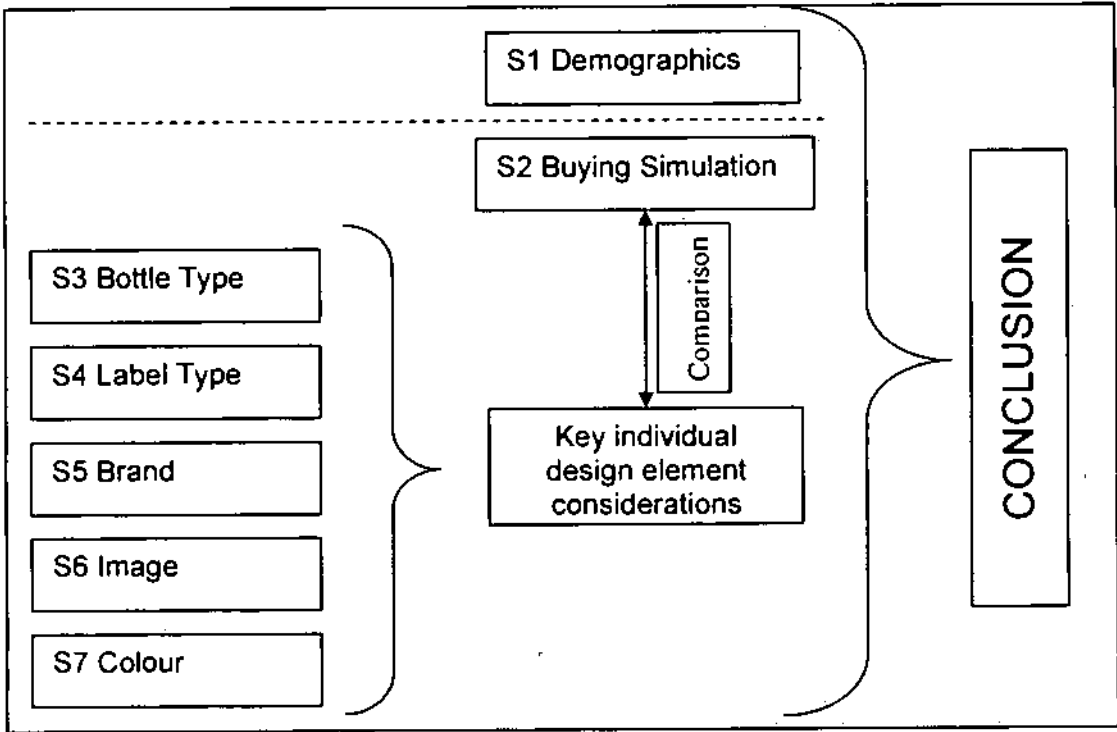


Figure 5-1 Discussion and Conclusion Structure

The demographic profile results obtained in section one of the sample is discussed and compared to existing information. Thereafter, section two's Buying Simulation results are discussed to obtain an initial overview of consumer choice preference at the purchase decision.

Section three through seven are then discussed reviewing the packaging and design elements in isolation to obtain an understanding of consumer preferences for each element. This is then summarised as the key individual

design elements which is compared to the initial overview of section two's buying simulation.

The chapter is then concluded with the key inferences and interpretations being highlighted.

5.1 Discussion

The discussion section provides an overview of the results obtained in the data collection process. The discussion of these results was structured to follow the thought process designed in the literature and methodology chapters.

5.1.1 Section one: Demographics

As the focus of the research is to understand choice preference of consumers in LSM categories 1 to 4, the first section of data collection focused on the demographic profile of the sample population. The primary objective of the section was to ensure that the sample population fitted the target consumer profile with the secondary objective of highlighting any differences with existing profile information.

5.1.1.1 Education

In comparison to the 2003 statistics on educational attainment by African adults older than 20 years as obtained by Statistics SA, the level of unschooled respondents per the study (16%) was in line with the 2003 results (15%). Similarly, the Post Matric education of the study (4%) was inline with the 2003 survey results (5%).

There was a notable difference in the study's results compared to the 2003 survey in respect of those respondents that had attained a Matric or Grade 12 certificate. According to the 2003 survey, only 13% of African adults older than

20 had this level of education, whilst 67% had less than Matric schooling with a combined total of 80% having at least some level of schooling. By comparison, the study population had a combined 80% of respondents have at least some level of schooling. The study group however was divided between those respondents having Grade 1 to Grade 9 education attained versus those that had between Grade 10 to Grade 12 (Matric).

As the Matric category was not mutually exclusive in the study, it is difficult to draw inferences from the categories surveyed by the researcher but to say that the overall population is in line with the 2003 results of Statistics SA, which shows little improvement from 2003 to date in the population of the study.

5.1.1.2 Household income

Income is positively correlated with Living Standards Measures (LSM), however this does not imply a lack of basic living standards for consumers in lower LSM categories. LSM 1 is the lowest level on this socio-economic scale and LSM 10 being the highest (Salmon, Njobe and Biggs, 2005).

Statistics of the South African population in 2004 show that 50,5% of the population were housed in LSM categories 1 to 4 (Salmon, Njobe and Biggs, 2005). Also noteworthy is that as much as 57,2% of total expenditure for a household in LSM 1 is on food. In LSM 2 to 3 this expenditure on food is 49,8% of total household expenditure alone (Salmon, Njobe and Biggs, 2005). This highlights the limited availability of income for use in acquiring luxuries to be discussed below.

Of the population sampled for this research, 94.1% fell into LSM categories 1 to 4 in line with the target sample of the study. It is noted as a limitation of the study that unemployment levels amongst the sample was not tested.

5.1.1.3 Residence

Rural consumers, typical of LSM categories 1 and 2, would reside in traditional huts or informal dwellings. Urbanization trends in South Africa have seen the rise of informal settlements and squatter camps where typically LSM 3 to 4 consumers would reside in shacks or matchbox houses (Salmon, Njobe and Biggs, 2005).

The results of the study confirm that 16,7% and 75,5% reside in traditional huts and matchbox houses respectively, thus confirming the consumers surveyed fit the consumer LSM category 1 to 4.

5.1.1.4 Basic Amenities

Basic amenities in areas from which respondents were drawn vary from area to area. Whilst the South African Government continues with its efforts to provide adequate housing to the population, short term methods include providing residents with running water and electricity to land stands with the resident erecting a hut or shack type dwelling.

Approximately 60% of the respondents surveyed had access to running water and flushing toilets, above the national average of 46% in 2004 (Salmon, Njobe and Biggs, 2005).

Whilst a limitation of the study exists in that access to electricity was not surveyed, the consumers lack of access to hot water is not expected to be a result of lack of access to electricity. Low income levels of respondents surveyed is believed to be the highest contributing factor in that access to disposable income in purchasing a hot water geyser and associated costs in running thereof may be the hindrances.

5.1.1.5 Luxuries

Luxuries owned by consumers surveyed were viewed more the role they play in relation to consumer purchases of fresh milk. As such, ownership of a radio, television set and a telephone was considered the mechanisms for creating brand awareness to these consumers of milk. Ownership of a refrigerator was considered in respect of the perishable nature of fresh milk and the motor vehicle considered in terms of transport for grocery shopping.

Salmon, Njobe and Biggs (2005) highlight net increase in ownership of appliances such as televisions, radios and refrigerators across LSM categories 3 to 5.

Ownership of electrical appliances is conditional on a consumer having access to electricity and again highlights the electricity limitation of the study. It is not clear from the results as to whether lack of access to electricity or disposable income played the bigger role for those who did not own these appliances.

The results highlight that a greater portion of the respondents surveyed own a radio, television set and telephone providing a mechanism for advertising and marketing to these consumers. This would thus result in improved ability for marketers to target these consumers to increase brand awareness.

A smaller proportion of respondents surveyed owned a refrigerator with the researcher drawing two inferences from this result. The first inference is that a refrigerator is inherently a more costly appliance than a television or radio and thus the consumer's availability of disposable income dictates the order of acquisition. The second inference being that consumers in these categories make food type purchase decisions based on the lack of refrigerator access and thus limiting the necessity therefore. Fresh milk as an example of a perishable product is consumed by the African population in its fresh form and as it begins to ferment, again limiting the necessity for refrigeration.

5.1.1.6 Typical purchase location

The typical purchase location of the consumers surveyed was divided into three main categories being;

- Convenience e.g. Spaza Shop
- Independent wholesale e.g. Cash & Carry
- Retailers e.g. Supermarket.

Of the consumers surveyed, 40,4% indicated that the convenience location was their typical purchase location with 25,3% and 34,3% stating same for the Independent wholesaler and retailer respectively. This result provides limited information without obtaining the consumers reasons for the choice of purchase location.

The choice of purchase location was then crosstabulated with the method of transport used by the consumer to arrive at the locations and provided useful information.

The convenience purchase location was used by the largest portion of consumers that arrived there by walking supporting its nature of convenience. The Cash & Carry and Supermarket options were reached only by means of transport by taxi or owned vehicle. The placement of these various types of purchase establishments is possibly the key factor, with few major retailers and independent wholesalers having premises in rural and informal settlement locations.

Whilst results of the typical purchase location choice of the consumer provides no insight into the reason for use of the location or how it affects fresh milk purchases, it provides support for the LSM classification of the consumers into the focus categories of 1 to 4.

5.1.1.7 Demographic summary

The results obtained in respect of demographic information finds support for

the classification of the sample population as being that of LSM categories 1 to 4. This confirms one of the primary elements of the problem statement in which the focus of the research is consumers in LSM 1 to 4.

5.1.2 Section two: Buying Simulation

The Fresh Milk Buying Simulation was designed to obtain an initial impression of choice preference at the purchase decision by the consumers. Whilst this does not fully replicate the numerous elements that may affect the purchase decision such as involvement level and time pressure (Silayoi and Speece, 2004), it provides an insight into the impact of packaging and design elements on choice preference.

Respondents were presented with the ten milk samples in the simulation, the reasons for the choices made provide a stronger insight into the choice preference as opposed to the milk sample chosen. Three areas of response namely price, brand and image, as highlighted in Table 4-17 and Figure 5-2 below, present significant results. The bottle choice and choice substantiation results were then crosstabulated against each other for further detail, as seen in Table 4-18. These findings are discussed below.

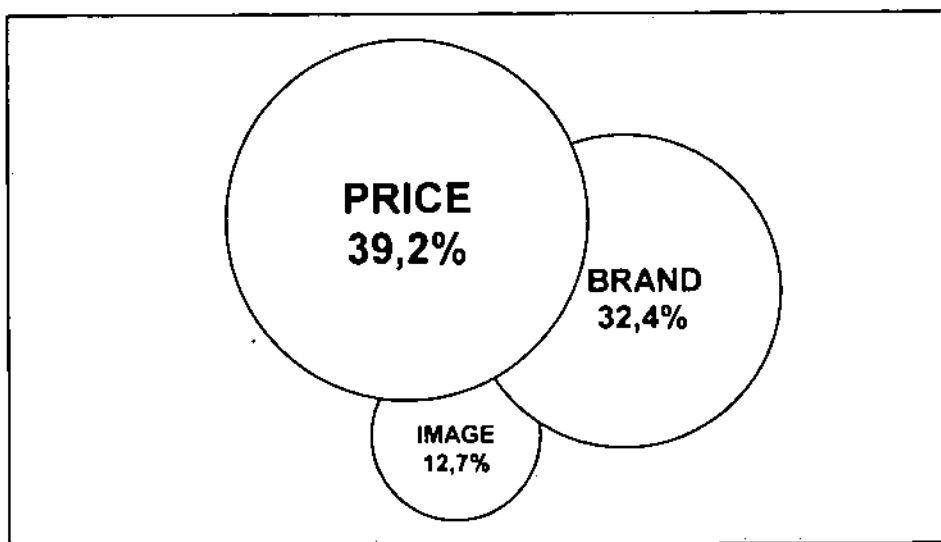


Figure 5-2 Significant areas of Choice Preference

5.1.2.1 Price

The primary area of significant response was the importance of the price of the product. This option was selected by 39,2% of respondents in substantiation for their milk bottle choice. Consumers in low LSM categories have little disposable income and spend over 50% of income on food stuffs. This is believed by the researcher to be the key reason for the significant results obtained in this area for consumer in LSM 1 to 4 categories.

Crosstabulation results for price against milk bottle chosen highlight higher rate of selection for the Coetzee Dairy and Kruin Dairy bottles which were presented at the lowest price. Selections were also notable for the Dewfresh, Clarabell's, Wynn-with and Douglasdale bottles, with these bottles being presented at higher prices. Whilst this should not detract from the fact that over 50% of the price option selections were made on the lowest cost options, it is submitted by the researcher that the question posed allowed a level of ambiguity and with the survey being quantitative in nature further inferences are limited. What remains clear is the significant level of respondents who made their decision based on price.

5.1.2.2 Brand

The second area of significant response was that of brand trust or brand awareness which was selected by 32,4% of respondents surveyed. While Perrault and McCarthy (2005) advocate improved effects a brand can have on efforts to sell a product, it is possibly the positive experience (Perrault and McCarthy, 2005) or expectation fulfilment leading to "habit" brand loyalty (Silayoi and Speece, 2004) that has the greatest impact. With the limited income of these consumers, they cannot afford to be disappointed by a product failure such as poor quality milk that expires prematurely or has been adulterated by the processor to exploit the consumer. As such, consumers place a strong attachment to the quality of the product in association with the brand name.

Crosstabulation results of the brand trust or brand awareness choice substantiation compared to the milk bottle choice highlight a clear preference. Clarabell's Dairy sample was chosen by almost 50% of respondents in their brand choice. Whilst all national milk brands were omitted from the simulation, three familiar brands (Clarabell's Dairy, Dewfresh and Douglasdale) were included in the sample. These brands were included and expected to be familiar to some of the respondents. It is important to note that during the Stage Two of Phase One in the research methodology, qualitative support was found for these brands based on quality expectations. It is thus believed that the result obtained here is significant in that it highlights the importance of brand awareness and the quality perception associated thereto.

5.1.2.3 Label Image

The third area of significant response was the consumer's choice preference of the label image used. Whilst the result was significantly lower than the brand and price areas already mentioned, it is noteworthy that it was the packaging and design element most selected at this stage. This supports the importance of the use of visual stimuli in the form of pictures and illustrations as found by Underwood et al. (2001) and Ekuan et al. (2001).

Crosstabulation results for image preferences compared to choice of milk bottle found that almost 50% of respondents selected the Clarabell's Dairy sample. Whilst the overall significance of the image selection is much smaller than price or brand significance, it does highlight the importance of the graphic element.

5.1.2.4 Buying Simulation Summary

As highlighted in the literature review, price and brand are the important areas to consider in marketing of fresh milk. The Milk Buying Simulation provides meaningful insight into the choice preference of the consumer at the purchase decision with the focus on LSM 1 to 4. These results will be compared to the

key findings on the individual sample elements surveyed in section three to seven as highlighted in 5.1.3 below.

5.1.3 Key Individual Design Element Considerations

Section three to seven were designed to cover the each of the packaging and design elements in isolation as opposed to the overall view taken in section two. The elements of packaging medium, labels, brand, image and colour are discussed as to how these elements contribute to the collective whole of the product when presented to the consumer in isolation.

5.1.3.1 Section 3: Packaging medium

Packaging size and shape has been found to have an impact on the consumers purchase decision (Silayoi and Speece, 2004). Whilst these are important considerations, the study made use of a standard 2 litre size bottles and the bottle shape used in the fresh milk market segment is a generic shape. The use of pigmented bottles versus clear bottles brings another dimension to the subject of packaging medium.

From the results in Figure 4-12, it was clearly evident that the respondents had no difficulty in identifying the white bottles from the clear bottles in the sample. Thus, despite a similar overall appearance between the white bottle samples and the clear bottle samples, the type of bottle used can be differentiated by consumers and thus can form part of the choice preference in the overall purchase decision.

Respondents indicated a marginal preference for the white pigmented bottle over the clear bottle when compared directly, containing no milk or label. This preference was further supported in Table 4-21 where consumers indicated that the white pigmented bottle had a positive effect on quality perception. The "clinical" appearance of the bottle has an aesthetically pleasing effect which in turn is perceived to contain higher quality milk.

While this quality improvement perception may be an illusion to the consumer, respondents indicated the willingness to pay a price premium for milk packaged using the pigmented bottle (Table 4-22). This is likely to be seen as a positive outcome for the discerning marketing manager considering the pigmented bottle too comes at a cost premium.

Silayoi and Speece (2004) found that consumers were attracted to a packaging medium that was convenient and easy to carry. Two elements of convenience surveyed in the study included the need to see milk in the bottle at the purchase decision as well as the use of the empty milk bottle.

Respondents indicated that many used the empty bottles as convenient for storage of other liquids. These liquids can be of a variety including, paraffin for stoves and lamps, water collected from centralised points or cleaning chemicals.

The ability to see milk in the bottle, possible with the clear and not with the pigmented bottle, was clearly an important consideration for the consumer. The clear majority of the sample, as seen in Table 4-20, indicated the importance of being able to see the product in the bottle. This is attributed to the ability to assess the level of milk contained in the bottle and to further assess the condition of the milk. Consumers in LSM 1 to 4 have limited income levels and ensuring that milk is bought at a satisfactorily filled level ensures value for money. The second factor is the ability to identify milk that may not be at their expected quality level. Milk that is at the later stages of its shelf life will show signs of separation which is visible at the neck of the bottle and acts as a quality signal to the consumer.

Results obtained provide evidence to support the assumptions made in 3.2.1 that respondents would prefer the white pigmented bottle over the clear bottle and consumer willingness to pay a price premium for the bottle.

In isolation, the white pigmented bottle is preferred by the respondents and is expected to enhance the overall appearance of the product, despite its limitation on product visibility.

5.1.3.2 Section 4: Labels

In low product involvement situations, such as that of fresh milk, the visual elements of graphics and colour are expected to have a positive influence on consumer preference (Silayoi and Speece, 2004). Whilst this plays an important role, it requires a label surface to be practical for application. The type of labels used on the fresh milk bottles includes the adhesive version and its wraparound counterpart.

The ability of the consumer to identify a wraparound label applied to a bottle versus an adhesive label was tested and results shown in Figure 4-18. Three of the samples, Clarabell's Dairy, Wynn-with and Dougladale, contained wraparound labels and were consistently identified by the respondents. The fourth sample with a significant but incorrect selection rate, FreshPak Dairy, made use of an adhesive label that extended onto the side panel of the bottle. As such, bottles can be differentiated by making use of wraparound labels however this option is not exclusive to the wraparound label as highlighted by the FreshPak label.

Respondents indicated a clear preference for the wraparound label type versus the adhesive label type. The greater surface area covered in colour, brand and marketing is believed to be the highest contributing factor along with the high gloss finish, giving the product a premium look and appealing to consumer aspiration.

The wraparound label had a positive effect on quality perception of the product with 68,6% of respondents indicating such as can be seen in Table 4-26. The aesthetically pleasing appearance of the wraparound label increased area for visual stimuli to build further on the consumer perceptions.

The preference for the wraparound label and its positive effect on quality perceptions gains further support in the consumer's willingness to pay a price premium for product making use of the label (Table 4-27). The aesthetic appeal is believed to be the greatest contributor to consumer willingness. Similarly to the packaging medium results, the use of the wraparound label provides a positive dimension to product differentiation.

Results obtained found evidence to support the assumptions made in 3.2.1 in that respondents were likely to prefer the wraparound label to the adhesive label and that the consumer would be willing to pay a premium for a wraparound label.

In isolation, the wraparound label is preferred by the respondents and is expected to enhance the overall appearance of the product.

5.1.3.3 Section 5: Brand

According to Bogart and Lehman (1973), products with a similar identity rely on brand identity for differentiation which is vital to competitive selling. 74,8% of respondents surveyed indicated that the brand name was an important factor when purchasing milk. Whilst literature advocates the importance of brand identity for differentiation, consumers in LSM categories 1 to 4 would appear to primarily derive an element of trust through brand.

Table 4-29 highlights that 63,7% of respondents surveyed indicated a loyalty toward a brand in as much as they would continue to purchase a brand they trusted. This supports the literature found for low involvement products. These products result in weak "habit" brand loyalty where consumers who have their expectations met have a tendency to remain "satisfied" with the brand. (Silayoi and Speece, 2004). This "habit" loyalty of brand would expedite the purchase decision (Perrault and McCarthy, 2005).

Brand awareness findings highlight the important role of familiar brand names to consumers as can be seen in Table 4-30. Findings indicate that 61,4% of

respondents would look for an alternate but familiar brand if their "habitual" brand was not available. Whilst respondents appeared to be willing to switch between familiar brands, they were less receptive to the idea of switching to an unfamiliar brand (Table 4-31). According to Dansei (2006), the brand name comes to represent value and beliefs that are socially acceptable and "fit" with the lifestyle of the consumer. The value derived by the consumer can be defined as the quality expectation associated with the brand. The failure of a product can be costly to the consumer with limited income. The ability of the product to continuously deliver at a level of expectation, building consumer trust, is possible the primary dimension of brand for these consumers.

Emphasising the role of brand loyalty and brand awareness may not necessarily provide the product marketer with solution to satisfying these consumer needs. The findings highlighted in Table 4-34 indicate that milk remains a commodity product in that consumers would not travel further to buy a familiar brand. Thus brands that fail to penetrate areas and consistently maintain their availability may suffer the loss of customers to rival brands. Convenience of access to milk is an important consideration.

Willingness to pay a price premium for a brand was confirmed by 67,5% of respondents as can be seen in Table 4-32. Table 4-35 highlights the effect of a brand name on quality perception with 89,1% of respondents indicating a familiar brand was a signal for higher quality levels. As such the consumer's willingness to pay a price premium for a brand appears to extend from perception of superior quality, and ultimately from the trust the consumer would have in a familiar brand.

A key finding in this section is the results of the question as to whether the consumers believed price to be more important than brand or vice versa. Table 4-33 highlights that 73,8% of respondents surveyed indicated price to be of greater importance than brand. Key to this discussion is the impact of low levels of income of consumers in LSM 1 to 4 prohibiting their ability to make the purchase decision on brand alone. Whilst these consumers remain brand

conscious, price appears to be a primary consideration in the purchase decision.

As highlighted in the section, choice preferences of consumers support the importance of brand, with emphasis on trust, when brand is surveyed in isolation. The connotations of quality and trust associated with brand are important considerations as must be viewed in light of the key finding of price importance over brand.

5.1.3.4 Section 6: Image

Underwood et al. (2001) found support for use of pictures on packaging to gain attention for a brand in a store. The findings of the survey support this finding in that 74,8 percent of respondents indicated the use of a picture on the label to be important (Table 4-38). Table 4-25 highlights the finding that 82,4% of respondents indicated noticed the image used in the packaging design before noticing colour.

With the importance of picture use on the label noted, the visual stimuli plays an important role in the consumer recalling a brand purchased. Erdelyi and Becker (1974) provide support for the use of pictures and illustrations as an effective method for improving recall of a product. Recall was tested in this study and may provide an area for future research.

Grossman and Wisenblit (1999) found that graphics and colour become critical elements in catching the consumer's attention with low involvement decisions as made with commodity products such as milk. Whilst Grossman and Wisenblit (1999) advocate the importance of both graphics and colour, respondents surveyed indicated strong preference for picture importance over colour use as can be seen in Table 4-41. The impact of colour use on the label is not denounced with this finding when considering the findings of Madigan and Lawrence (1980). Their study found that the addition of colour to pictures improved hypermnesia i.e. recall of the picture, thus suggesting that colour serves to enhance the image used. Thus colour and picture are an

important combination in visual stimuli with picture taking the visual cue leading role.

Picture vividness has also been highlighted as having a positive impact for products with lower involvement levels (Silayoi and Speece, 2004) and Madigan and Lawrence (1980) found that use of improved image quality improved recall of the image. Results of the study found that 54,9% of respondents indicated a higher preference for the use of a photographic image (Table 4-40). A realistic drawing or illustration also had significant selection rate at 38,2% with the cartoon image clearly not a preferred option at 6,9%. These results however do not necessarily correlate with the responses of the respondents when asked which images they preferred across the ten sample bottles provided. The FreshPak Dairy sample was the only label to contain a photographic image and was selected by only 12,2% of respondents as can be seen in Table 4-36. High selection rates were noted for the Clarabell's Dairy (35,7%) and Wynn-with (18,4%) samples both which make use of realistic drawings. Although this was not tested, the initial view of the researcher of these selection rates may be the result of the size of cow image used on the bottles being greater in proportion to the label size than the remaining samples. The Coetzee Dairy sample was the least liked sample by 37,4% of respondents. This was attributed to the use of the cartoon drawing type image used.

When respondents were surveyed as to the importance of an image of a cow on the label as visual cue for the bottle containing milk, the results were unanimous in indicating the definite importance (Table 4-39). Ekuan et al. (2001) emphasized the use of imagery on the packaging and brand design to overcome illiteracy, language and dialect. Whilst the initial results of the respondents appeared to support the findings of Ekuan et al. (2001), the results of crosstabulation of education levels to importance of visual stimuli were not as conclusive. Education crosstabulation with visual stimuli did not offer results to signify that images were any less important at higher levels of education attained by respondents. The use of an image of a cow as a visual cue to signify milk was important across all four education levels surveyed.

This was supported by the crosstabulation findings in Table 4-48 in which higher education levels indicated the importance of the image use in packaging design. Thus, the use of image to overcome literacy, language and dialect needs to be tested in more detail, but the use of visual cue is important across all education levels.

Surveying respondents on the image element of packaging design in isolation found support for the importance of image use on packaging design. Whilst literature advocates the importance of both image and colour, the results suggest that image may be a primary visual cue. Colour appeared to play a secondary role which possibly serves to enhance the image on the pack.

The results obtained found evidence to support the assumptions made in section 3.2.1 in that a photographic type image would be preferred by consumers as opposed to an illustration or cartoon type image.

The type of image used also played an important role. Whilst respondents confirmed their preference for photographic type images, the realistic drawings of cows was selected most frequently when viewing the compliment of samples. It is unclear to the researcher as why this contradictory result occurred but to assume that image content played a role, an area that needs to be researched further. It was clear however that cartoon type drawings were not favoured.

5.1.3.5 Section 7: Colour

As highlighted in the previous section, the finding of Grossman and Wisenblit (1999) in respect of graphics and colour, graphics appears to play a higher role in attracting consumer attention, with colour a secondary enhancement method. When respondents were asked as to the importance of colour on choice preference when purchasing an unfamiliar brand, 59,8% of respondents did not consider colour to be important.

Colour preferences were tested by asking respondents to select the label that had the colour scheme they liked and then disliked. Several options, as highlighted in Table 4-42, had significant selection rates. No apparent commonality appears to exist across the preferred selection and the test result is limited in that substantiation for selection was not surveyed and needs to be considered in future research.

Table 4-43 highlights the results of colour schemes on the samples disliked by the respondents. The Coetzee Dairy sample was disliked by 41,6% of respondents and the result was far more significant than any of the remaining samples. The minimal use of colour on the label coupled with the use of the less preferred cartoon drawing type image is assumed to be the contributing factors to the result. It is important to point out that despite the Coetzee Dairy's sample being clearly disliked in image type use and colour scheme, its was a preferred option in respect of pricing as highlighted in Table 4-18.

The results obtained did not find evidence to support the assumptions made in section 3.2.1 that colour was considered an important element of label design by consumers

5.1.3.6 Summary of Key Design Elements

Having reviewed each of the elements of packaging and design, the key design elements that need to be considered are summarised as follows;

Brand of the product was an important consideration with emphasis on the perception of quality associated with a familiar brand name. Brand awareness provides consumers a satisfactory level of assurance that the product will meet their minimum expectation. "Habit" loyalty of consumers was confirmed with consumers willing to switch between familiar brands but more conservative when switching to unfamiliar brands.

The quality perception of a product can clearly be enhanced by use of aesthetically pleasing packaging and design elements such as the white pigmented bottle and wraparound label. Quality perception is an important consideration for consumers in LSM 1 to 4 as minimum standard quality of milk is expected by the consumer. Brand trust and awareness contributes to this significantly.

Image use in packaging and label design was clearly evident to be important to consumers. The use of visual stimuli was important across all education attained levels of the consumers with the importance of visual cues emphasised. Type of image used was considered with consumers preferring the photographic type image. Colour use aids in enhancing the effectiveness of image use for overall appeal to the consumer.

Consumers are willing to pay a price premium for aesthetically pleasing packaging and design elements including the white pigmented bottle and the wraparound label. There was a further willingness to pay a premium price for familiar brands of milk. Whilst this willingness is noted as a positive result for the marketing of products, it is believed by the researcher that this willingness extends from consumer aspirations rather than consumers actual ability to afford the premium commanding elements.

The findings detailed above provided the researcher with an overview of how consumers view the individual elements in packaging design. These findings were then compared to the findings of the Milk Buying Simulation in 5.1.2 and discussed in section 5.1.4 below.

5.1.4 Discussion Overview

From the results obtained in the research, price consideration plays an important role in the purchased decision of the consumers in LSM 1 to 4. What is important to note is that this result does not suggest consumers in

these categories cannot be exploited on price alone as brand consideration plays a deciding role from a quality perspective.

At the purchase decision, the consumer is limited by the availability of disposable income of the household when making a product selection. As was found in the results, consumers in this category are aspirational in their thought processes and are willing to pay premium for the aesthetically pleasing elements such as wraparound labels and the white pigmented bottles. In reality however, the ability of these consumers to afford the premium commanded by these enhancing elements on a commodity product is limited.

Figure 5-3 below is proposed by the researcher as the process flow in choice preference at the purchase decision by the consumer.

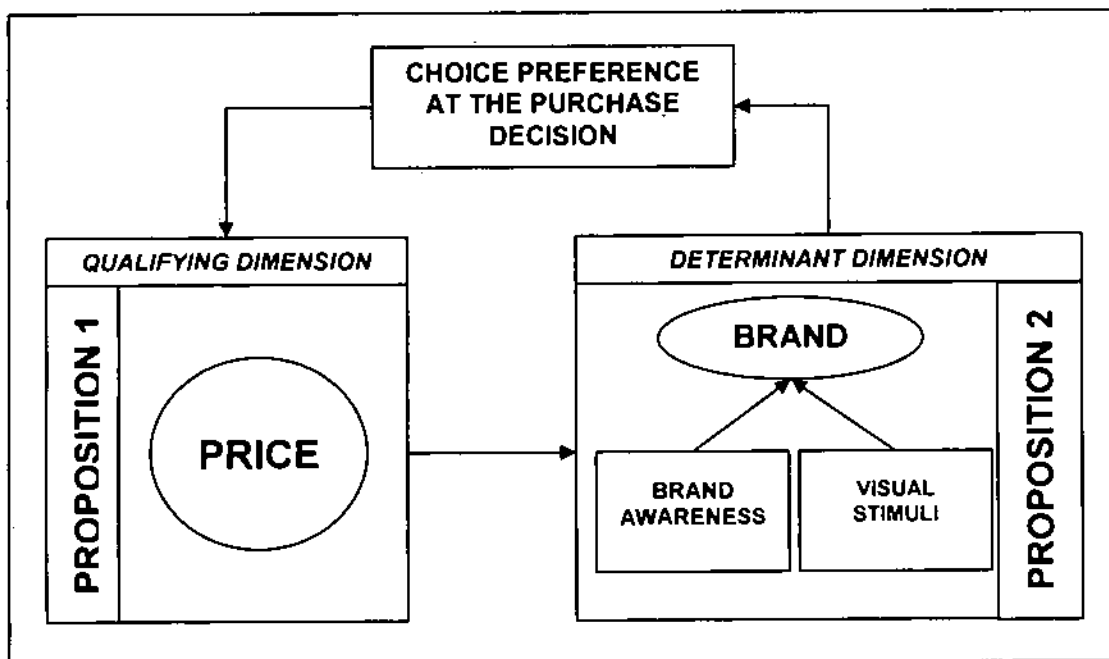


Figure 5-3 Purchase Decision Process

The purchase decision of the consumer flows through a process of a primary or qualifying dimension stage before moving onto the secondary or determinant dimension stage. At the qualifying stage, the consumer considers the issue of price of the product and once satisfied, moves onto brand and packaging design considerations.

The milk buying scenario results of section 5.1.2 highlight the overall importance of price to the consumer. Brand importance too had a significant result in the same section, yet results of section 5.1.3.3 clearly highlight the importance of price over brand when compared directly. This confirms price as the key component of the qualifying dimension and the consumer's ability to afford a product must be considered in the marketing strategy. This finding provides evidence that supports proposition 1 of the study. Only once consumers are satisfied with the price level they can afford, the purchase decision moves onto the determinant dimension.

The determinant dimensions considered by the consumer include brand and packaging design. The consumer, having progressed through the qualifying dimension, then has to consider the elements of the products that will help them decide which option to purchase. The results highlight two main elements that consumers consider in the purchase decision, brand awareness and visual stimuli in the form of images.

As highlighted, a commodity product relies on its packaging to sell itself (Pilditch, 1972 cited in Silayoi & Speece, 2004), yet the results of the study found an important consideration preceding this notion. The quality of the product, as associated with a brand name, is an important factor for the consumers.

The element of brand that becomes relevant in the determinant dimension is brand awareness. Brand awareness plays the role of providing the consumer a reminder or cue that this brand acquired previously met expectation in respect of quality. This trust association with brand is vitally important to the consumers as product failure is costly to the consumer. The high percentage of household incomes in LSM 1 to 4 being spent on foodstuffs means that consumers cannot afford to make a milk purchase on price alone for fear of product failure. Satisfaction with a brand's quality is important in the purchase decision and this brand awareness is an important determinant dimension.

In the purchase decision of milk, the price and brand awareness become the dominant factors in choice preference. At the qualitative stage of research methodology, a respondent interviewed confirmed that in purchasing milk, the brand name was considered important as brand awareness reduced risk of acquiring poor quality products. The respondent confirmed that purchasing unfamiliar name brands had previously resulted in disappointment due to product adulteration or quality failure.

With this in mind, the willingness of respondents to pay a premium for milk through brand awareness is highlighted. This price premium is motivated by quality satisfaction through previous acquisition of the brand and is supported by the results on brand loyalty. Further support for this finding comes in the finding that consumers are more willing to switch between brands they are familiar with than brands they have not acquired previously. As such brand awareness could be considered a qualifying dimension but for the ability of brand awareness to command a premium. A consumer faced with the decision of paying a premium for a trusted brand where income may be limited, could be forced to re-evaluate their choice decision on price. Selecting unfamiliar brand name milk that satisfies the qualifying dimension may lead to the consumer switching products to a new brand that then satisfies expectations and the consumer loyalty is lost. Based on the results obtained in the study, brand awareness is one of the key determinant dimensions considered by a consumer at the purchase decision and as such supports proposition 2.

In understanding the choice preferences of the consumer at the purchase decision of fresh milk, the importance of price as a qualifying dimension is highlighted and the effect of brand awareness as a determinant dimensions has been discussed. The element of packaging design has an important effect on the choice preferences in the determining dimensions.

At the purchase decision of fresh milk the consumer could be faced with two scenarios where packaging design becomes important, assuming that the qualifying dimension has been satisfied. In the first scenario the consumer is

presented with more than one familiar brand of product. In the second scenario, the consumer is presented with more than one unfamiliar brand of product.

In both these scenarios, as stated by Pilditch, 1972 as cited in Silayoi & Speece (2004), the packaging becomes the on-shelf “salesman”. The results of packaging design elements surveyed highlight the importance of visual stimuli on the label design, with emphasis on the image or illustration used. The results highlight the importance of the use of images on the packaging. The milk buying scenario provided the first insight into the effect of images on the packaging, with results in section 5.1.3.4 confirming that image was noticed before colour on the label. Results confirmed the importance of image use as visual cues and that type of image used. The effect of image content needs to be considered in future research as well as these content proportions.

Whilst the results of the of the elements of packaging design find image to be a key area in determinant dimensions, image does not compare to the initial importance of brand awareness. The basis for this conclusion is that whilst a packaging design may be appealing to the consumer, having satisfied the price qualifying dimension, consumers would consider brand awareness before considering image. The importance of image use does support proposition two in that both brand awareness and image are the key determinant dimensions, but this result is qualified in as much as the weighting of the importance is skewed toward brand awareness.

A fresh milk package design that captures the attention of a consumer through its image use would appear to have an advantage over its rivals in the purchase decision. This is not to say that elements of colour, font appropriateness, packaging medium or label type are not important in packaging design. It is suggested that the image is a focal point and that packaging design around this point using the additional elements to enhance the overall aesthetic appeal would be an important design strategy. It is the

marketer that can find the balance between price and brand that may a meaningful impact when targeting consumers in LSM 1 to 4 segments.

5.2 Conclusion

In attempting to obtain an understanding of the effect of branding and packaging design on choice preference at the purchase decision of consumers in LSM categories 1 to 4, this study found support for the propositions formulated in the problem statement.

Understanding the decision process flow (Figure 5-3) provides useful insight into the purchase decision. The finding that price is the primary concern of consumers in LSM categories 1 to 4, and is a prerequisite to consideration of branding and packaging design, provides clear guidance in developing a marketing strategy aimed at these consumers.

The importance of brand awareness and its association with quality is another importing finding. This finding confirms that whilst consumers in LSM 1 to 4 have limited disposable income, they remain brand conscious and resilient to exploitation by means of adulterated or inferior quality fresh milk.

Packaging design preference findings include the use image of high importance and key where consumers in LSM 1 to 4 need to make a purchase decision choice between familiar or unfamiliar brands. The inclusion of aesthetically pleasing package elements appeals to the aspirations of these consumers who are willing to pay premium prices albeit that lack of disposable income is a prohibiting.

Until consumers in LSM 1 to 4 mobilise and move up to higher LSM categories and their ability to pay premiums for these elements is realized, it is the marketing strategy that can provide the best mix of price and brand that will ultimately succeed.

6 Chapter Six: Article for Publication

UNDERSTANDING THE EFFECT OF BRANDING AND PACKAGING DESIGN ON CHOICE PREFERENCE IN THE PURCHASE DECISION OF FRESH MILK

Abstract Brand and packaging design is an important factor in the choice preferences of the consumer when making a purchase decision on low involvement products such as pasteurized milk. This research utilized a mixed-methodology design approach on understand consumer behavior toward brand and packaging design and how these elements affected the purchase decision. Price sensitivity plays a prerequisite role in the consumer purchase decision and whilst most are willing to pay a price premium for brand and packaging design elements, limited income is a clear inhibitor. Brand awareness and trust plays an important role in quality perception followed by image as part of visual stimuli in choice preference. The challenge for researchers is the understanding of the limitation of the consumers and then finding a balanced marketing mix for both price and brand to suit consumer expectation and aspiration.

Introduction

Understanding the behaviour of consumers who have limited access to income, and live in rural or urban informal settlements where infrastructure is limited, provides a unique challenge research.

This is a large consumer group making up as much as fifty percent of the country's population which in turns spends over fifty percent of their income levels on food stuffs. Often discarded as unimportant due to their limited income or exploited by offering them low cost substandard products, little effort is made in trying to understand the needs and expectations of these consumers. Yet, the importance of this group is underestimated and the choice preferences are expected to be no less unique than those found in other consumer groups.

As South Africa continues its transformation in respect of equality and upliftment of the poor, consumers in this group are becoming mobile in the emerging middle class movement. Understanding the behaviour of these consumers assists with offering the best product solutions and being a substantial size consumer group, suggests that a marketing strategy designed around this understanding can have far reaching effects.

Understanding how brand and packaging design is perceived by these consumers and the impact it may have on their decision to purchase a product is the underlying theme of this research report.

Literature review: Overview of the Dairy Industry

The first recordings of milk that was used as human food date back to 9000BC in the Middle East and evidence of cattle herds being kept and milk production practices date to 7000BC in Turkey (Bylund, 2003). Domesticated cows were herded through much of Europe and Asia during the Age of Exploration, and these domestic breeds were introduced to many of the colonies. With the arrival and establishment of colonies by the Dutch Settlers and the British Empire to southern Africa in the 1600's, many varieties of these domesticated cow breeds arrived and herds were established for milk production and consumption. The first record of a farmer making a living on production and sale of milk in South Africa dates back to 1656 (Dairy Marketing, 2007)

According to Gertenbach (1992), Holstein-Friesland, Jersey, Ayrshire, Guernsey, Swiss-Brown and the Dairy Shorthorn are recognized as the six main types of dairy breeding cattle in South Africa. Holstein-Friesland is the favoured breed for dairy farming based on the animal's high milk yield, with Jersey milk the next favoured breed based on its high butterfat and protein content.

Since 1994, with abolition of the Dairy Board in South Africa, milk producers (primary industry) can now produce and sell their own milk, on their own to milk processors (secondary industry) with prices based on supply and demand (Dairy Marketing, 2007). This industry is further characterised by an instability character due to the ecological differences between dairy farming regions and the cyclical demand for milk. Lower milk production in winter

creates a shortage which then increases milk prices. The primary industry then produces more milk at the higher price and as a result supply may exceed demand creating surpluses and a subsequent decrease in the milk price. According to Makgetla (2007), price collusion is currently under investigation among the secondary industry players. These players have been accused of denying the primary industry increases to their selling prices for almost five years which had a dramatic effect on the dairy industry. This together with rising input costs, such as the high commodity prices for maize has reduced the profitability in dairy farming. Since 1997, the number of primary producers has reduced from 7000 to 4100 in 2006. (Makgetla, 2007) This dramatic drop in milk producers has exacerbated the milk shortage problem in South Africa, driving up input costs and riving up the milk price being paid by the consumer. There is evidence that the milk shortage is a worldwide problem which is forcing up milk prices around the globe. Evans and Rossingh (2007) report that the greater demand for milk from China and Latin America and high maize prices, preventing farmers from increasing their herds, are contributing to the shortage. This is compounded by subsidies eliminating surpluses in Europe, slowed production in the USA and drought reducing Australia's ability to maintain exports. Growth in annual milk consumption has increased by 3% and the worlds milk producers have failed to match the demand. The challenges faced by the local and international dairy industries has resulted in drastic price increases to the secondary industry which in turn has seen increases in price in dairy products to the consumer.

Pasteurized milk

During 2006, approximately 2,4 billion litres of milk was produced by the primary industry. According to the Milk Producers Organization, representative body of the primary sector, only 30% of the total milk produced was processed into pasteurized milk. The other 70% is used across other dairy categories. (Makgetla, 2007). The processing of milk from raw milk into a pasteurized milk product is carried out by the secondary industry. Milk from the Holstein-Friesland herds is commonly used to be processed for direct consumer use. It

is not uncommon for milk processed by the secondary industry to be a combination of milk collected from the variety of known breeds.

Milk is a complex product and is made up of several principal components namely water, fat, proteins, lactose and minerals. Trace amounts of other substances such as enzymes, vitamins and pigments are also found (Bylund, 2003). Minimum standards are legislated in the Foodstuffs, Cosmetics and Disinfectants Act of 1972, the Health Act of 2003 and the Agricultural Products Standards Act of 1990 for each of these components (The Dairy Standards Agency, No Date). These components can also be altered through processes to produce different products in this milk group such as skim milk, low fat milk and whole milk within the accepted standards.

The raw milk goes through stages of standardization, pasteurization and homogenization processes to produce end product pasteurised milk for direct consumption (Bylund, 2003). The shelf life of pasteurized milk is very dependent on the quality of the raw milk used and if of sufficient high quality should last for 8 to 10 days at temperatures between 5 and 7 degrees Celsius. Pasteurized milk is classified as a Fast Moving Consumer Goods (FMCG) market product and according to Silayoi and Speece (2004), FMCG products are more than often low involvement products. A pasteurized milk product across a range of suppliers does not offer any differing characteristics or information differences between the products. There is thus little for a consumer to evaluate when making the purchase decision of pasteurized milk resulting in its low involvement classification. With little to differentiate by way of product characteristics and information, pasteurized milk products compete in two main areas, price and brand.

This comparable pricing and lack of characteristics and information that can differentiate one product from the next, leaves the consumer with very little to evaluate when selecting a pasteurized milk product. Prendergast and Pitt (1996) suggest that packaging is one of the most important factors in the purchase decision at the point of sale and it is estimated that 73% of purchase decisions are made at the point of sale (Rettie and Brewer, 2000). With little else to differentiate the products the pack design becomes the "salesman on the shelf" (Pilditch, 1972 cited in Silayoi & Speece, 2004) at the point of sale for pasteurized milk. Packaging is a primary vehicle for communicating and

branding of products to consumers (Rettie and Brewer, 2000) and plays an important role in the branding strategy of FMCG products.

The importance of branding and packaging design

According to Bogart and Lehman (1973), products that are very similar rely on brand identity to create the perception or impression that they are in fact different and this is vital to competitive selling. Building strong brands is an important strategic element for any company. A well recognized brand can expedite the purchase decision of the consumer which in return reduces the time and efforts required to sell a product (Perrault and McCarthy, 2005). With low involvement products and the lack of evaluation by the consumer, causing the inability of the consumer to distinguish between brands, results in a weak "habit" brand loyalty. Consumers that purchase a brand that meets their expectation have a tendency to remain "satisfied" with the brand, especially if they are constantly receive cues about the brand (Silayoi & Speece, 2004). Silayoi and Speece (2004) highlight findings in survey data from Thailand that packaging played an important role in reminding the consumer about the brand and helped to reinforce habit loyalty.

Multiple elements make up the concept of packaging design and include text, shape, graphic design, logo, size, colours, illustrations, material, construction, and texture (Underwood et al., 2001). A good packaging design makes a product more easily identifiable and promotes the brand at point of sale, (Perrault and McCarthy, 2005) and the design of the pack itself may be incentive to buy the product (Hall, 1993). Silayoi and Speece (2004) concluded that visual elements of the package influence the choice of product with graphics and colour being the major factor. Picture vividness was identified to have the most positive impact for products with lower levels of involvement. In a low involvement situation, such as that of FMCG and thus pasteurized milk, the visual elements of graphics and colour, size and shape can thus be expected to positively influence consumer choice. (Silayoi and Speece, 2004).

Visual elements of packaging design

The visual elements of packaging design include three key areas namely, use of graphics, use of colour and the packaging design and shape.

Graphics

Graphics is defined as the visual stimuli that include elements such as logo, font appropriateness and pictures or illustrations used in packaging design. Danesi (2006) defines a logo as the pictorial comparative to a brand name. Logos are designed as a signal mechanism for a product in a visual channel, which interconnects products with the daily life of consumers (Danesi, 2006). Hertenstein, Platt and Brown (2001) found strong support for improved financial performance of a corporation where careful focus had been placed on design effectiveness.

Doyle and Bottomly (2004) tested font appropriateness use in the visual equity of a brand or logo and highlight the importance of font appropriateness as an element of visual stimuli when used in a company or brand name.

Underwood et al. (2001) examined the attentional effects of incorporating a picture or illustration of the product on the packaging of the product. The study found evidence to support that package pictures can gain attention for the brand in the store. The use of pictures was successful in gaining attention to low familiarity brands and suggests an important role for pictures on packages. In low involvement decisions, graphics and colour become critical elements in catching the consumer's attention. (Grossman and Wisenblit, 1999). Ekuan et al. (2001) detail the importance of imagery in packaging and brand design as a strategy to overcome illiteracy, language and dialect. Erdelyi and Becker (1974) provided strong support that visual stimuli was learned faster than verbal stimuli and was thus a more effective method for improving recall. The use of pictures and illustration is more easily recalled than when words are used.

Colour

Colour selection is one of the components of packaging and brand design that further enhances visual stimuli. As found in a study done by Madigan and Lawrence (1980), addition of colour to pictures presented to subjects improved hypermnesia. Improving the quality of the picture presented and

adding colour over a series of recall tests identified that these additions improved recall of images presented. Madden et al (2000) found that consumers are similar in their liking of colour and colour meaning in many parts of the world.

Packaging shape and size

Saliyoi and Speece (2004) found that packaging shape and size has an impact on a consumers purchasing decision. Packaging shape can enhance the aesthetic appeal of a product, however it is noteworthy that preference for shape will vary between adults and children (Saliyoi and Speece, 2004).

Country Demographic Profile

In South Africa, low literacy, 11 official languages and various dialects poses challenges to marketers when marketing strategies are crafted. According to estimates presented by Statistics South Africa (2006) the country has a population of 47,4 million people. This estimation indicates a 16,7% growth in population when compared to the census of 1996 where the population total was 40,6 million. 79,5% of the population estimate in 2006 is made up by the African population group.

Low literacy levels affect a large portion of the South African population. Literature discusses two levels of illiteracy namely functional illiteracy and total illiteracy. Aitchison (2001) defines functional literacy as having the basic life skills needed for effective functioning in society i.e. the workplace. Total illiteracy is defined as those adults no younger than 15 years old that have had no formal schooling whatsoever. The studies by Rule (2003) and Aitchison (2002) both set out to evaluate the performance of Adult Basic Education Training in the country. Rule (2003) highlights the poor improvement in adult literacy and that the importance of Adult Basic Education Training is a responsibility that the government of South Africa needs to fulfill and which can improve personal and social development in the country. It is highly realistic that low levels of illiteracy will remain a significant problem for the country and will not be easily rectified in the short and medium term future. Salmon, Njobe and Biggs (2005) present results indicate that 50,5% of the country's consumers are classified in LSM categories one to four. This group

of consumers spends in excess of fifty percent of its disposable income of foodstuff. Whilst Living Standard Measures is not an income indicator (Haupt, 2006), income levels are directly correlated with LSM categories. Consumers in these LSM categories one and two are characterized as those living in rural areas, in traditional mud hut dwellings with little to no access to basic amenities such as electricity and water. The monthly income levels range from R0 to R1,500 per month (Salmon, Njobe and Biggs, 2005). Consumers in categories three and four are characterized as those living in new urban areas in the form of informal of squatter camps with dwellings that are matchbox in nature. Increased levels of access to basic amenities such as electricity and water are present and the monthly income levels range from R1,500 to R2,500 per month (Salmon, Njobe and Biggs, 2005). There is evidence that this group is mobilizing and moving towards LSM categories five and upward creating an emerging black middle class.

Understanding the country specific demographic make-up and the implied challenges thereof is crucial to a corporation in the selection and design of its logo, packaging, signage and so on. Failure to design a strategy that includes illiterate consumers can result in the exclusion of sizeable portions of the market. These illiterate consumers are susceptible to misunderstanding the message a corporation tries to convey through its marketing strategy. With a market that has low levels of literacy, many languages and dialects, there is the further challenge of ethical marketing to these consumers. The acceptable standards of marketing in developed countries may not be acceptable to those consumers in developing or less industrialized countries. Corporate behaviour is an important element of the overall corporate image (Van Heerden and Puth, 1995). Overlooking local challenges can have detrimental ethical and bottom line impact if not considered carefully by the corporation.

The literature review provides the theoretical foundation for the study and provides an overall background into the dairy industry, information on brand and packaging design and the consumer demographic profile. The findings of the study will be compared to literature reviewed in the discussion

Methodology

The research strategy comprises three phases with a mixed-methodology

design approach being used. This approach includes the use of qualitative and quantitative methods to obtain data and information that can provide insight into the research question. Data collected using a mixed-methodology design approach uses complementary data-gathering activities and can aid in overcoming weaknesses in individual data collection tactics (Lee, 1999). Descriptively rich and quantitatively meaningful data is thought to be the product of a mixed-methodology design approach (Lee, 1999).

Phase one involves the obtaining of the understanding of the background literature in respect of pasteurized milk and the components of branding and packaging design involved. This phase included qualitative procedures in the form of interviews and test samples to assist in establishing the relevant data that needs to be collected.

Phase two involved the developing of a survey questionnaire and electronic presentation of the questionnaire for data collection purposes. These mechanisms were subsequently tested in a pilot study and refined before being used for the data collection being sought in the survey.

Phase three moves on to the carrying out of the survey and covers the methodology used in the sample selection, data collection approach and the measurement instruments to be used. This phase further addresses the methods that will be employed for preparing and analysing the data collected and determining the reliability and validity thereof.

A non-probability method for selecting the sample for the survey was obtained through convenience sampling. Three local communities to that of the researcher were identified as areas where individuals and households would typically fall into LSM categories 1 to 4, the required category of respondents for the study. A judgemental approach was taken as to the communities that would satisfy the criteria of the survey. Diamantopoulos and Schlegelmilch (2000) define judgemental sampling as the scenario where the sample members are chosen on the researcher's judgement as what a representative sample should constitute.

Data was collected using a questionnaire consisting of thirty-nine questions divided into seven sections. The questions were predominantly dichotomy scaling formats and determinant choice scales. Section one of the questionnaires made provision for collection of data in respect of Life Style

Measure categories. Section two through seven of the question was designed to collect data in respect of purchase habits and considerations of the respondents. Section two of the questionnaire was designed to include an initial overarching question relating to the milk bottles in the form of a simulation in which respondents were presented with a sample of bottles, asked to select one for purchase and substantiate the choice.

The questionnaire and electronic presentation followed a systematic flow with each question in the questionnaire having a corresponding visual aid. Images were used in the electronic presentation do provide a visual reference to the questions being posed. A facilitator and assistant provided support to the respondents to clarify questions that were not understood.

Findings

The demographic profile results obtained in section one of the sample is discussed and compared to existing information. Thereafter, section two's Buying Simulation results are discussed to obtain an initial overview of consumer choice preference at the purchase decision. Section three through seven are then discussed reviewing the packaging and design elements in isolation to obtain an understanding of consumer preferences for each element. This is then summarised as the key individual design elements which is compared to the initial overview of section two's buying simulation.

Demographic Profile (Section one)

As the focus of the research is to understand choice preference of consumers in LSM categories 1 to 4, the first section of data collection focused on the demographic profile of the sample population. The primary objective of the section was to ensure that the sample population fitted the target consumer profile with the secondary objective of highlighting any differences with existing profile information.

The results obtained in respect of demographic information finds support for the classification of the sample population as being that of LSM categories 1 to 4.

Buying Simulation (Section two)

The primary area of significant response was the importance of the price of the product. This option was selected by 39,2% of respondents in substantiation for their milk bottle choice. Consumers in low LSM categories have little disposable income and spend over 50% of income on food stuffs. This is believed by the researcher to be the key reason for the significant results obtained in this area for consumer in LSM 1 to 4 categories. Whilst this should not detract from the fact that over 50% of the price option selections were made on the lowest cost options, it is submitted by the researcher that the question posed allowed a level of ambiguity and with the survey being quantitative in nature further inferences are limited. What remains clear is the significant level of respondents who made their decision based on price.

The second area of significant response was that of brand trust or brand awareness which was selected by 32,4% of respondents surveyed. While Perrault and McCarthy (2005) advocate improved effects a brand can have on efforts to sell a product, it is possibly the positive experience (Perrault and McCarthy, 2005) or expectation fulfilment leading to "habit" brand loyalty (Silayoi and Speece, 2004) that has the greatest impact. With the limited income of these consumers, they cannot afford to be disappointed by a product failure such as poor quality milk that expires prematurely or has been adulterated by the processor to exploit the consumer. As such, consumers place a strong attachment to the quality of the product in association with the brand name.

The third area of significant response was the consumer's choice preference of the label image used. Whilst the result was significantly lower than the brand and price areas already mentioned, it is noteworthy that it was the packaging and design element most selected at this stage.

Key individual design elements

Section three to seven were designed to cover the each of the packaging and design elements in isolation as opposed to the overall view taken in section two.

Brand of the product was an important consideration with emphasis on the perception of quality associated with a familiar brand name. Brand awareness

provides consumers a satisfactory level of assurance that the product will meet their minimum expectation. "Habit" loyalty of consumers was confirmed with consumers willing to switch between familiar brands but more conservative when switching to unfamiliar brands.

The quality perception of a product can clearly be enhanced by use of aesthetically pleasing packaging and design elements such as the white pigmented bottle and wraparound label. Quality perception is an important consideration for consumers in LSM 1 to 4 as minimum standard quality of milk is expected by the consumer. Brand trust and awareness contributes to this significantly.

Image use in packaging and label design was clearly evident to be important to consumers. The use of visual stimuli was important across all education attained levels of the consumers with the importance of visual cues emphasised. Type of image used was considered with consumers preferring the photographic type image. Colour use aids in enhancing the effectiveness of image use for overall appeal to the consumer.

Consumers are willing to pay a price premium for aesthetically pleasing packaging and design elements including the white pigmented bottle and the wraparound label. There was a further willingness to pay a premium price for familiar brands of milk. Whilst this willingness is noted as a positive result for the marketing of products, it is believed by the researcher that this willingness extends from consumer aspirations rather than consumers actual ability to afford the premium commanding elements.

From the results obtained in the research, price consideration plays an important role in the purchased decision of the consumers in LSM 1 to 4. What is important to note is that this result does not suggest consumers in these categories cannot be exploited on price alone as brand consideration plays a deciding role from a quality perspective.

At the purchase decision, the consumer is limited by the availability of disposable income of the household when making a product selection. As was found in the results, consumers in this category are aspirational in their thought processes and are willing to pay premium for the aesthetically pleasing elements such as wraparound labels and the white pigmented

bottles. In reality however, the ability of these consumers to afford the premium commanded by these enhancing elements on a commodity product is limited. Figure 5-3 below is proposed by the researcher as the process flow in choice preference at the purchase decision by the consumer.

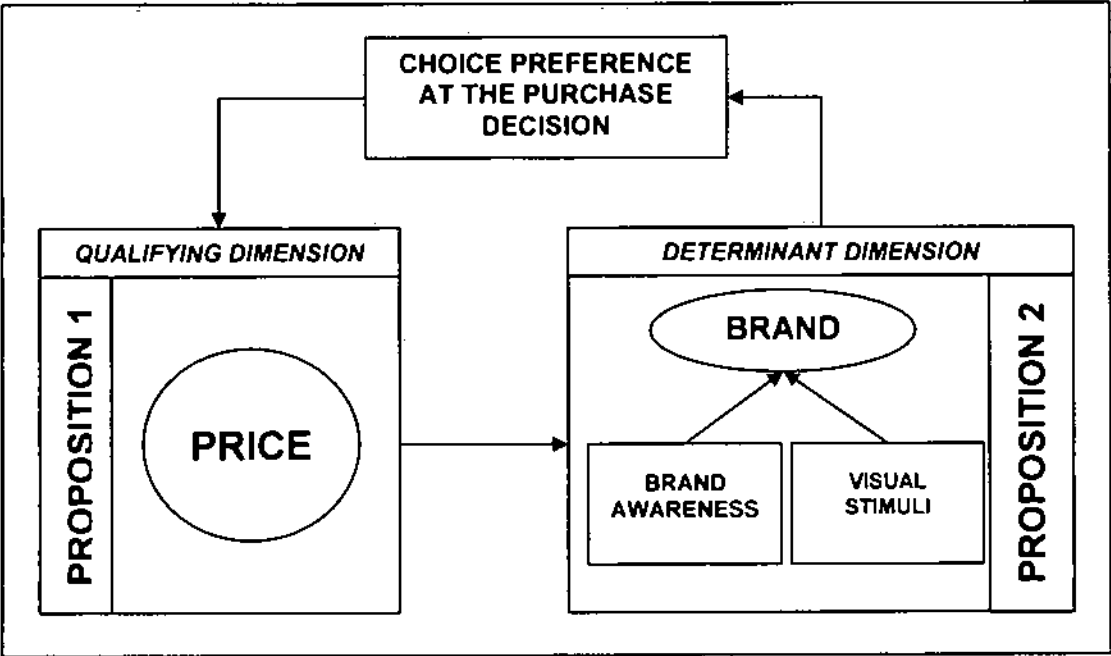


Figure 6-1 Purchase Decision Process

The purchase decision of the consumer flows through a process of a primary or qualifying dimension stage before moving onto the secondary or determinant dimension stage. At the qualifying stage, the consumer considers the issue of price of the product and once satisfied, moves onto brand and packaging design considerations. The milk buying scenario results highlight the overall importance of price to the consumer. Brand importance too had a significant result in the same section, yet results clearly highlight the importance of price over brand when compared directly. This confirms price as the key component of the qualifying dimension and the consumer's ability to afford a product must be considered in the marketing strategy. Only once consumers are satisfied with the price level they can afford, the purchase decision moves onto the determinant dimension. The determinant dimensions considered by the consumer include brand and packaging design. The consumer, having progressed through the qualifying dimension, then has to consider the elements of the products that will help them decide which option

to purchase. The results highlight two main elements that consumers consider in the purchase decision, brand awareness and visual stimuli in the form of images. As highlighted, a commodity product relies on its packaging to sell itself (Pilditch, 1972 cited in Silayoi & Speece, 2004), yet the results of the study found an important consideration preceding this notion. The quality of the product, as associated with a brand name, is an important factor for the consumers. The element of brand that becomes relevant in the determinant dimension is brand awareness. Brand awareness plays the role of providing the consumer a reminder or cue that this brand acquired previously met expectation in respect of quality. This trust association with brand is vitally important to the consumers as product failure is costly to the consumer. The high percentage of household incomes in LSM 1 to 4 being spent on foodstuffs means that consumers cannot afford to make a milk purchase on price alone for fear of product failure. Satisfaction with a brand's quality is important in the purchase decision and this brand awareness is an important determinant dimension. In the purchase decision of milk, the price and brand awareness become the dominant factors in choice preference. At the qualitative stage of research methodology, a respondent interviewed confirmed that in purchasing milk, the brand name was considered important as brand awareness reduced risk of acquiring poor quality products. The respondent confirmed that purchasing unfamiliar name brands had previously resulted in disappointment due to product adulteration or quality failure. With this in mind, the willingness of respondents to pay a premium for milk through brand awareness is highlighted. This price premium is motivated by quality satisfaction through previous acquisition of the brand and is supported by the results on brand loyalty. Further support for this finding comes in the finding that consumers are more willing to switch between brands they are familiar with than brands they have not acquired previously. As such brand awareness could be considered a qualifying dimension but for the ability of brand awareness to command a premium. A consumer faced with the decision of paying a premium for a trusted brand where income may be limited, could be forced to re-evaluate their choice decision on price. Selecting unfamiliar brand name milk that satisfies the qualifying dimension may lead to the consumer switching products to a new brand that then satisfies expectations and the

consumer loyalty is lost. Based on the results obtained in the study, brand awareness is one of the key determinant dimensions considered by a consumer at the purchase decision.

In understanding the choice preferences of the consumer at the purchase decision of fresh milk, the importance of price as a qualifying dimension is highlighted and the effect of brand awareness as a determinant dimensions has been discussed. The element of packaging design has an important effect on the choice preferences in the determining dimensions. At the purchase decision of fresh milk the consumer could be faced with two scenarios where packaging design becomes important, assuming that the qualifying dimension has been satisfied. In the first scenario the consumer is presented with more than one familiar brand of product. In the second scenario, the consumer is presented with more than one unfamiliar brand of product. In both these scenarios, as stated by Pilditch, 1972 as cited in Silayoi & Speece (2004), the packaging becomes the on-shelf "salesman". The results of packaging design elements surveyed highlight the importance of visual stimuli on the label design, with emphasis on the image or illustration used. The results highlight the importance of the use of images on the packaging. The milk buying scenario provided the first insight into the effect of images on the packaging, with results confirming that image was noticed before colour on the label. Results confirmed the importance of image use as visual cues and that type of image used. The effect of image content needs to be considered in future research as well as these content proportions.

Whilst the results of the of the elements of packaging design find image to be a key area in determinant dimensions, image does not compare to the initial importance of brand awareness. The basis for this conclusion is that whilst a packaging design may be appealing to the consumer, having satisfied the price qualifying dimension, consumers would consider brand awareness before considering image. The importance of image use does support proposition two in that both brand awareness and image are the key determinant dimensions, but this result is qualified in as much as the weighting of the importance is skewed toward brand awareness.

A fresh milk package design that captures the attention of a consumer through its image use would appear to have an advantage over its rivals in the

purchase decision. This is not to say that elements of colour, font appropriateness, packaging medium or label type are not important in packaging design. It is suggested that the image is a focal point and that packaging design around this point using the additional elements to enhance the overall aesthetic appeal would be an important design strategy. It is the marketer that can find the balance between price and brand that may have a meaningful impact when targeting consumers in LSM 1 to 4 segments.

Conclusion

Understanding the decision process flow (Figure 5-3) provides useful insight into the purchase decision. The finding that price is the primary concern of consumers in LSM categories 1 to 4, and is a prerequisite to consideration of branding and packaging design, provides clear guidance in developing a marketing strategy aimed at these consumers. The importance of brand awareness and its association with quality is another important finding. This finding confirms that whilst consumers in LSM 1 to 4 have limited disposable income, they remain brand conscious and resilient to exploitation by means of adulterated or inferior quality fresh milk. Packaging design preference findings include the use of image of high importance and key where consumers in LSM 1 to 4 need to make a purchase decision choice between familiar or unfamiliar brands. The inclusion of aesthetically pleasing package elements appeals to the aspirations of these consumers who are willing to pay premium prices albeit that lack of disposable income is a prohibiting factor. Until consumers in LSM 1 to 4 mobilise and move up to higher LSM categories and their ability to pay premiums for these elements is realized, it is the marketing strategy that can provide the best mix of price and brand that will ultimately succeed.

7 References

1. Aitchison, J.J.W. (2001). *Reading and writing in the new South Africa: literacy and adult basic education training in South Africa*. Pietermaritzburg: University of Natal.
2. Anonymous. (2000). *Dairy Marketing*. Animal Nutrition and Animal Products Institute.
3. Bogart, L., Lehman, C. (1973). *What makes a brand name familiar?* Journal of Marketing Research, 10(1), 17-22.
4. Brenkert, G.G. (1998). *Marketing to Inner-City Blacks: PowerMaster and Moral Responsibility*. Business Ethics Quaterly, 8(1), 1-18.
5. Bylund, Gosta. (2003). *Tetra Pak Dairy Processing Handbook*. Lund, Sweden. Tetra Pak Processing Systems AB.
6. Coetzee, R. (1982) *Cultural Roots*. In: *Funa Food from Africa*. Pretoria. Butterworths: 5 – 104.
7. Cooper, D.R., Schindler, P.S. (2001). *Business Research Methods*, 7th Edition. New York: Irwin/McGraw-Hill.
8. Danesi, M. 2006. *Brands and Logos*. Toronto: University of Toronoto.
9. Diamantopoulos, A., Schlegelmilch, B.B. (2000). *Taking the fear out of data analysis*. London: Harcourt Brace & Company Limited.
10. Doyle, J.R., Bottomley, P.A. (2004). *Font appropriateness and brand choice*. Journal of Business Research, 57, 873-880.

11. Ekuan, K., Francey, P., van Niekerk, R., Butler, D. et al (2001). *Powerful Brands – Perspectives of design managers from around the globe*. Design Management Journal, 12(1), 57-62.
12. Erdelyi, M.H., Becker, J. (1974). *Hypermnesia for pictures: Incremental memory for pictures but not words in multiple recall trials*. Cognitive Psychology, 6, 159-171.
13. Evans, G. Rossingh, D. (2007) *Milking the world's consumers*. The Business Day. 15 May 2007.
14. Gertenbach, W.D. (1992). *Breeds of Dairy Cattle*. Cedara Agricultural Development Institute.
15. Grossman, R.P. Wisenbitt, J. Z. (1999). "What we know about consumers' colour choices", Journal of Marketing Practice: Applied Marketing Science, 5(3), 78-88.
16. Hall, J. (1993). *Brand development: how design can add value*, Journal of Brand Management, Vol. 1 No. 2, pp. 86-95.
17. Haupt, P. (2006). *The SAARF Universal Living Standards Measure (SU-LSM) 12 years of continuous development*. South African Advertising Research Foundation. <http://www.saarf.co.za/LSM/lsm-article.htm> [Accessed 27 April 2007].
18. Henderson, P.W., Cote, J.A. (1998). *Guidelines for Selecting or Modifying Logos*. Journal of Marketing, 62(2), 14-30.
19. Henderson, P.W., Cote, J.A., Leong, S.M., Schmitt, S. (2003). *Building strong brands in Asia: selecting the visual components of image to maximize brand strength*. International Journal of Research in Marketing, 20, 297-313.

20. Hertenstein, J.H., Platt, M.B., Brown, D.R. (2001). *Valuing design: Enhancing corporate performance through the design effectiveness*. Design Management Journal, 12(3), 10-19.
21. Lee, T.W. (1999). *Using Qualitative Methods in Organizational Research*. California: Sage Publications, Inc.
22. Leedy, P.D., Ormrod, J.E. (2005). *Practical Research: Planning and Design*. 8th Edition. New Jersey: Pearson Prentice Hall.
23. Madden, T.J., Hewett, K., Roth, M.S. (2000) *Managing images in different cultures: A cross-national study of color meanings and preferences*. Journal of International Marketing, 8(4), 90-107.
24. Madigan, S., Lawrence, V. (1980). *Factors Affecting Item Recovery and Hypermnnesia in Free Recall*. The American Journal of Psychology, 93(3), 489-504.
25. Makgetla, T. (2007). *Milking the consumer*. Mail & Guardian Online. http://www.mg.co.za/printPage.aspx?area=/insight/insight_economy_business/&articleId=306. [Accessed 6 May 2007.]
26. Payne, D.G., Roediger III, H.L. (1987). *Hypermnnesia Occurs in Recall but Not in Recognition*. The American Journal of Psychology, 100(2), 145-165.
27. Perreault, W.D., McCarthy, E.J. (2005). *Basic Marketing: A Global-Managenial Approach*. 5th Edition. New York: McGraw-Hill/Irwin.
28. Pilditch, J. (1972). *The Silent Salesman*. London: Business Books Ltd.
29. Post, J.E. (1986). *The Ethics of Marketing: Nestle's Infant Formula*. Boston: Boston University.

30. Prendergast, P.G., Pitt, L. (1996). *Packaging, marketing, logistics and the environment: are there trade-offs?* International Journal of Physical Distribution & Logistics Management, 26(6), 60-72.
31. Republic of South Africa, Department of Agriculture. 1990: *Regulations regarding control over the sale of fruit drink products and blended fruit drink products*. Pretoria: Department of Agriculture.
32. Rettie, R. Brewer, C. (2000). *The verbal and visual components of package design*. Journal of product and brand management. 9 (1).
33. Rule, P. (2003). *"The time is burning": The right of adults to basic education in South Africa*. Pietermaritzburg: University of Natal, Centre for adult education.
34. Salmon, R. Njobe, T., Biggs, M. (2005). *Portrait of the South African Consumer*. South Africa: Deutsche Securities Research.
35. Silayoi, P. Speece, M. (2004). *Packaging and purchase decisions*. British Food Journal, 106 (8).
36. Statistics South Africa. (2006). *Mid-year populations estimates, South Africa 2006*. Pretoria: Statistics SA.
37. The Dairy Standards Agency. (No Date). *Regulations*. <http://www.dairystandard.co.za/regulations.asp>. [Accessed on 20 May 2007]
38. Van Heerden, C.H., Puth, G. (1995). *Factors that determine the corporate image of South African banking institutions: An exploratory investigation*. The International Journal of Bank Marketing. 13(3), 12-17.

39. Van Wyk, J. Britz, T.J. Myburgh, A.S. (2002). *Arguments supporting Kefir Marketing to the low-income urban African population in South Africa*. *Agrekon*, 41 (1).
40. Underwood, R.L. Klein, N.M. Burke, R.R. (2001). *Packaging communication: attentional effects of product imagery*. *Journal of product and brand management*. 10 (7).

8 Appendices

Annexure A – Powerpoint Presentation used in Survey

Annexure B – Questionnaire Completed by Respondents

RESEARCH QUESTIONNAIRE

Presented by
Wayne van Bijl

Facilitator
Normwiso Xhango

Assisted by
Innocentia Mashini

Information

- > Your questionnaires are confidential.
- > There are 39 questions. Please answer all.
- > It will take approximately 30 minutes.
- > Please make ONE selection per question unless facilitator says otherwise.
- > Use a tick or X mark.
- > Place pen on table to indicate ready to proceed.
- > Please ask you facilitators if you require any assistance.

GENERAL INFORMATION

1. Are you male or female?

Male		
		
Female		

2. What level of school have you completed?

No schooling	
Grade 1 to 9 / Std 7	
Grade 10 / Std 8 to Matric	
Studies after Matric	

3. What is the total income of your household per month?

R0 – R1100		
R1101 – R1900		
R1901 – R2500		
R2501 or more		

4. What type of house do you live in?

Rural Hut			
Shack			
RDP House			
Residential house			

5. Does your house have...

		Yes	No
a) Tap water			
b) Hot running water			
c) Flushing toilet (inside or outside)			

6. Do you or anyone living in your house have..

		Yes	No
a) A radio / hi-fi?			
b) A television?			
c) A telephone / cellphone			

6. Do you or anyone living in your house have..

		Yes	No
d) A fridge / freezer combo?			
e) Own motor car?			

7. Where do you buy groceries?

Spaza shop		
Cash and Carry		
Supermarket		

8. How do you get to the shop?

Walk		
Taxi or Bus		
Drive with a friend		
Use my own car		

Shopping for Milk

You are at home and you run out of milk...



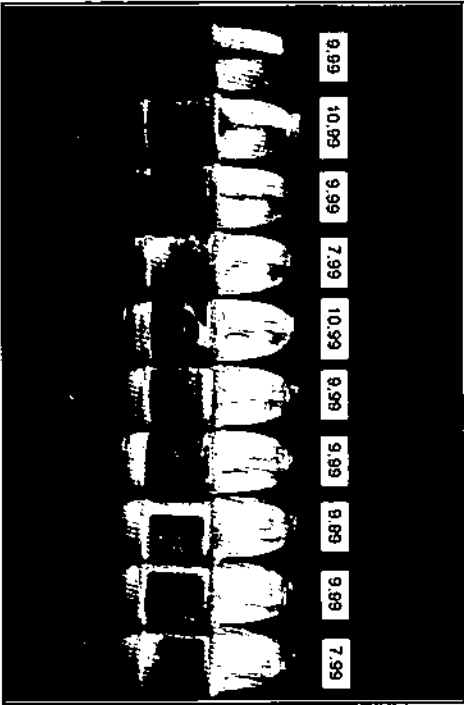
You go to the shop with R15 to buy milk...

When you get to the shop the fridge has only 2 litre bottles for sale...

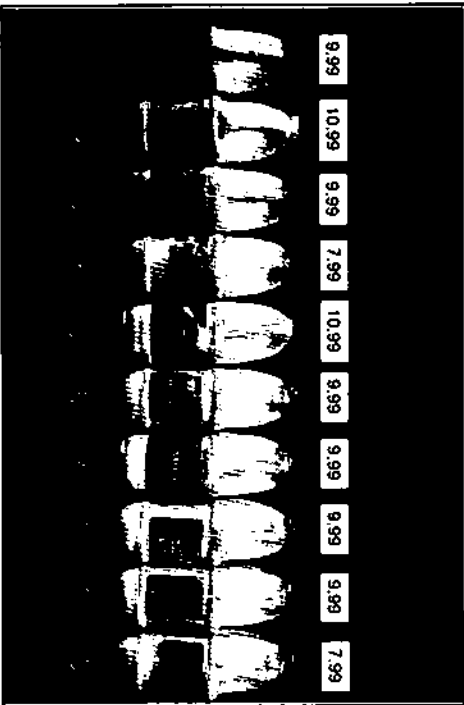
10. Why did you choose that milk?

I know and trust the name	
I like the label picture	
I like the label colours	
I like the type of bottle	
The price was right for me	
I just like the whole bottle	

9. Which one would you buy?



11. Can you tell which bottles are white and which are clear? Tick the numbers of the bottles that are white?



12. Which bottle do you prefer / like more?



White bottle	
Clear bottle	

14. Do you think the white bottle makes the milk look better quality than the clear bottle?

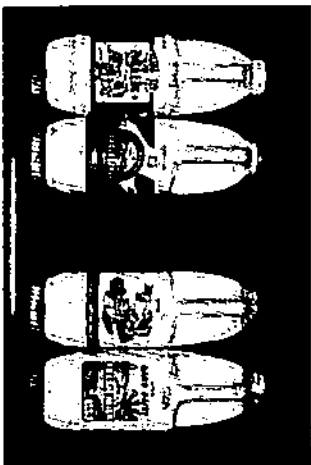


13. Is it important for you to be able to see the milk in the bottle?



YES	
NO	

15. Would you pay more for milk that comes in a white bottle than milk in a clear bottle?



YES	
NO	

16. What do you do with the bottle when it is empty?

I throw it away			
I use it for storage			

LABELS

17. Can you tell which bottles have a label that goes all the way around the bottle? Tick the numbers of the bottles.

9.99	10.99	9.99	7.99	10.99	9.99	9.99	9.99	9.99	7.99
									

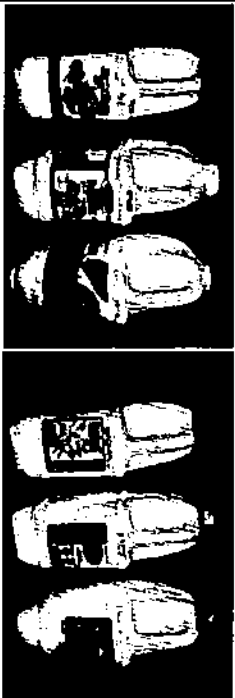
18. What type of label do you prefer / like more?

Wrap-around label		
Sticker label		

19. What do you notice first when you look at a label? The colour or the picture?

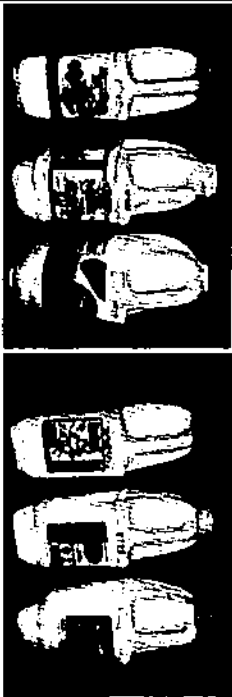
Colour		
Picture		

21. Would you pay more for milk that has a wrap-around label than a sticker label?



YES		
NO		

20. Does the wrap-around label make the milk look better quality than the sticker label?



YES		
NO		

BRAND
PERCEPTION

22. Is the name of the milk important to you when you buy milk?



YES		
NO		

23. Do you stick with a name that you trust?

YES		
NO		

24. If you could not find your usual name milk, do you look for another name you know?

YES		
NO		

25. If no milk with a name you know is available, will you buy milk with a name you don't know?

YES		
NO		

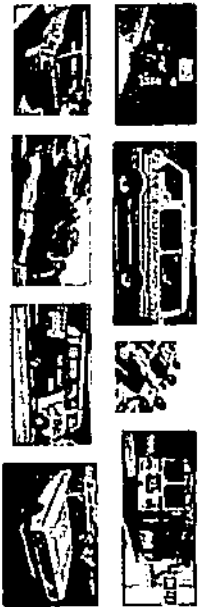
26. Would you pay more for a name that you know?

YES		
NO		

27. Is price more important to you than the name of the milk?

YES		
NO		

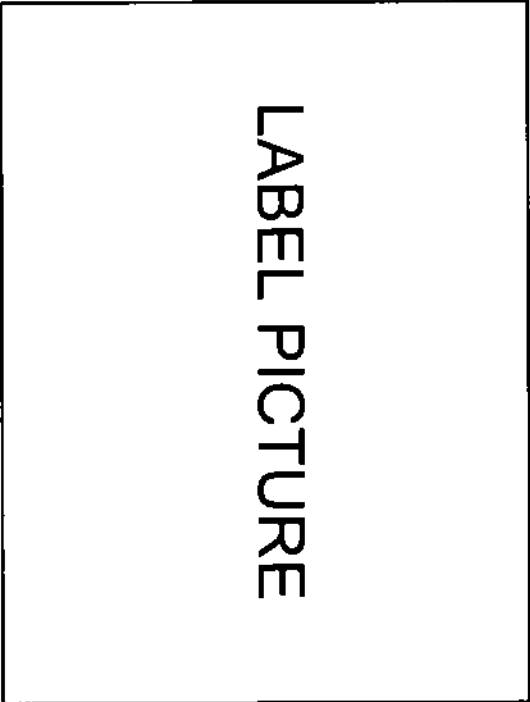
28. Would you travel further to buy a name that you know?



YES	
NO	

29. Is a well-known name a sign of good quality milk?

YES		
NO		



31. Which label has the picture you like the least?

9.99	10.99	8.99	7.99	10.99	9.99	9.99	8.99	9.99	7.99
------	-------	------	------	-------	------	------	------	------	------



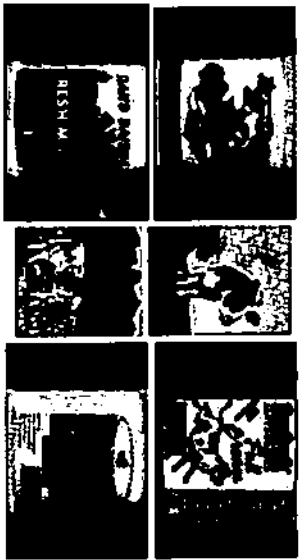
30. Which label has the picture you like the most?

9.99	10.99	9.99	7.99	10.99	9.99	9.99	9.99	9.99	7.99
------	-------	------	------	-------	------	------	------	------	------

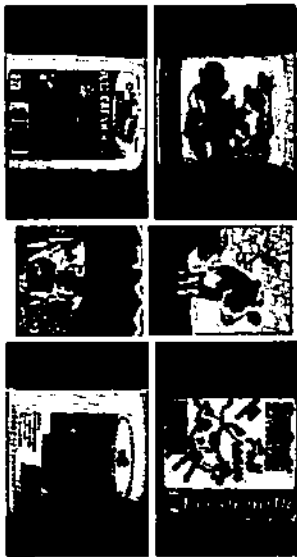


32. Is the picture on the label important to you when you buy a name of milk you don't know?

YES	
NO	

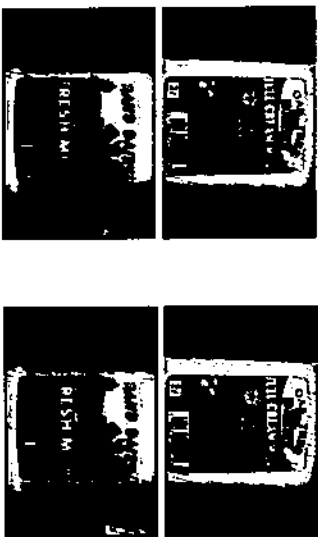


33. Is it important to have a picture of a cow on the label to show you that there is milk in the bottle?



YES	
NO	

35. Is a picture more important than colour on the label?

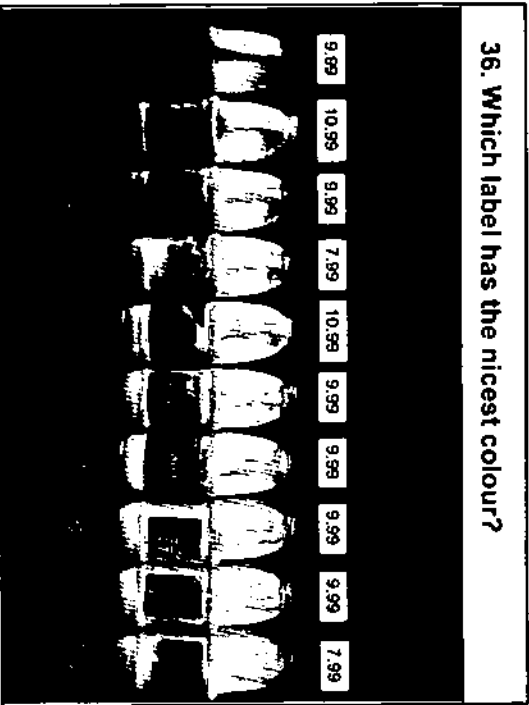


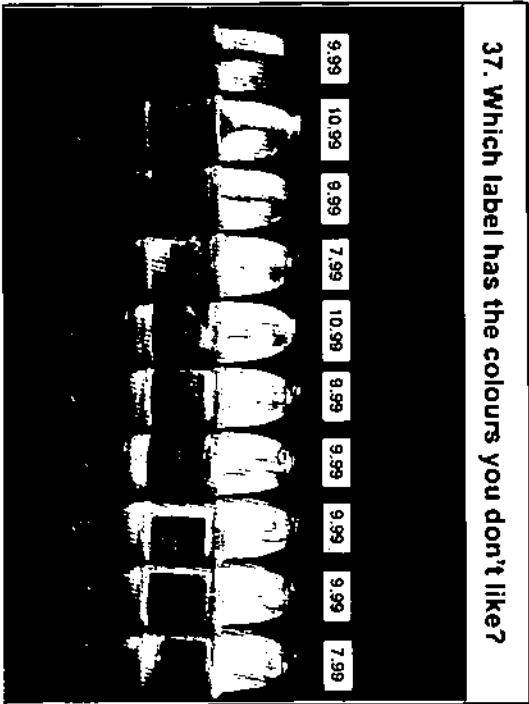
YES	
NO	

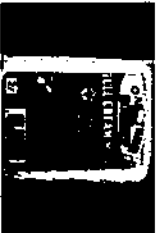
34. Which picture of a cow do you prefer / like more?

a) Cartoon cow			
b) Realist drawing of a cow?			
c) Photograph of a cow?			

COLOUR

36. Which label has the nicest colour?											
9.99	10.99	9.99	7.99	10.99	9.99	9.99	9.99	9.99	7.99		
											

37. Which label has the colours you don't like?											
9.99	10.99	9.99	7.99	10.99	9.99	9.99	9.99	9.99	7.99		
											

38. Is colour more important than the picture on the label?			
			
			
YES			
NO			

39. Is colour on the label important when you buy a milk name that you don't know?			
YES			
NO			

Questionnaire number	
----------------------	--

RESEARCH QUESTIONNAIRE

Presented by
Wayne van Biljon

Facilitator
Nomvuyiso Xhongo

Assistant
Innocentia Mashinini

Information and Guidelines

- This questionnaire has been designed to collect information to be used in a Research Project under the rules and guidelines prescribed by the UNISA School of Business Leadership.
- All information provided by you in this questionnaire will be treated in confidence.
- This questionnaire consist of 39 questions. Please make sure you answer all the questions.
- It should take approximately 30 minutes to complete the questions.
- Please make only one selection mark per question. You will be advised if any questions will require more than one.
- Please mark your choice making a tick or cross mark in the answer boxes provided.
- After answering each question, please place your pen on the table to indicate to the facilitator you are ready to proceed to the next question.
- Please ask the facilitator to clarify any questions you do not understand.

Thank you for taking your time to complete the questionnaire!

General Information

Please tick the appropriate box. You can only make one tick per question.

1. Are you male / female?

Male	
Female	

2. What level of school have you completed?

No Schooling	
Grade 1 to 9 / Std 7	
Grade 10 / Std 12 – Matric	
Post matric studies	

3. What is the total income of your household?

R0 – R1,100	
R1,101 – R1,900	
R1,901 – R2,500	
R2,500 or more	

4. What type of home you live in?

Rural hut	
Shack	
RDP house	
Residential house	

5. Does your home have...

	Yes	No
a) Tap water?		
b) Hot running water?		
c) Flushing toilet (inside or outside)?		

6. Do you or anyone living in your home have...

	Yes	No
a) a radio / hi-fi set?		
b) a television set?		
c) a telephone / cellphone?		
d) a fridge / freezer		
e) own motor car?		

7. Where do you buy groceries?

Spaza shop	
Cash and Carry	
Supermarket	

8. How do you get to there?

Walk	
Catch a taxi	
Drive with a friend	
Use my own car	

Shopping for Milk Scenario

You have run out of milk at home and you go to your Spaza shop / Cash & Carry / Supermarket to buy milk.

In the shop you see all these different milks bottles which are all 2 litre fill cream milk. There are no other size milk bottles in the shop.

9. You have R15 only and you must buy milk. Which one would you buy?

1)	2)	3)	4)	5)
6)	7)	8)	9)	10)

10. Why did you choose that milk?

I know and trust the name	
I like the label picture	
I like the label colours	
I like the type of bottle	
The price was right for me	
I just like the whole	

Bottles

11. Can you tell which bottles are white and which are clear? Tick the numbers of the bottles that are white. You can select more than one.

1)	2)	3)	4)	5)
6)	7)	8)	9)	10)

12. Which bottle do you prefer / like more?

The white bottle	
The clear bottle	

13. Is it important for you to be able to see the milk in the bottle?

Yes	
No	

14. Do you think the white bottle makes the milk look better quality than the clear bottle?

Yes	
No	

15. Would you pay more for milk that comes in a white bottle than milk that comes in a clear bottle?

Yes	
No	

16. What do you do with the bottle when it is empty?

I throw it away	
I use it for storage	

Labels

17. Can you tell which bottles have a label that goes all the way around the bottle? Tick the numbers of the bottle. You can select more than one.

1)	2)	3)	4)	5)
6)	7)	8)	9)	10)

18. What type of label do you prefer / like more?

The wraparound label	
The sticker label	

19. What do you notice first when you look at a label? The colour or the picture?

The Colour	
The Picture	

20. Does the wraparound label make the milk look better quality than the sticker label?

Yes	
No	

21. Would you pay more for milk that has a wraparound label than a sticker label?

Yes	
No	

Brand perception

22. Is the name of the milk important to you when you buy milk?

Yes	
No	

23. Do you stick with a name that you trust?

Yes	
No	

24. If you could not find your usual name milk, do you look for another familiar name?

Yes	
No	

25. If no familiar name milk is available, will you buy an unfamiliar name?

Yes	
No	

26. Would you pay more for a name that you know?

Yes	
No	

27. Is price more important to you than the name of the milk?

Yes	
No	

28. Would you travel further to buy a name that you know?

Yes	
No	

29. A well-known name is a sign of good quality milk?

Yes	
No	

Label pictures

30. Which label has the picture you like the most?

1)	2)	3)	4)	5)
6)	7)	8)	9)	10)

31. Which label has the picture you like the least?

1)	2)	3)	4)	5)
6)	7)	8)	9)	10)

32. Is the picture on the label important to you when you buy a name of milk you don't know?

Yes	
No	

33. Is it important to have a picture of a cow on the label to show you that there is milk in the bottle?

Yes	
No	

34. Which picture of a cow do you prefer?

1) Cartoon cow	
2) Realistic drawing of the	
3) Photograph of the cow	

35. Is a picture more important than colour on the label?

Yes	
No	

Colour

36. Which label has the nicest colour?

1)	2)	3)	4)	5)
6)	7)	8)	9)	10)

37. Which label has colours you don't like?

1)	2)	3)	4)	5)
6)	7)	8)	9)	10)

38. Is colour more important than the picture on the label?

Yes	
No	

39. Is colour on the label important when you buy a milk name that you don't know?

Yes	
No	

Questionnaire number	
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RESEARCH QUESTIONNAIRE

Presented by
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Nomvuyiso Xongo

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Information and Guidelines

- This questionnaire has been designed to collect information to be used in a Research Project under the rules and guidelines prescribed by the UNISA School of Business Leadership.
- All information provided by you in this questionnaire will be treated in confidence.
- This questionnaire consist of 39 questions. Please make sure you answer all the questions.
- It should take approximately 30 minutes to complete the questions.
- Please make only one selection mark per question. You will be advised if any questions will require more than one.
- Please mark your choice making a tick or cross mark in the answer boxes provided.
- After answering each question, please place your pen on the table to indicate to the facilitator you are ready to proceed to the next question.
- Please ask the facilitator to clarify any questions you do not understand.

Thank you for taking your time to complete the questionnaire!