

**INFLUENCE OF PRODUCT PACKAGING ATTRIBUTES ON CHOICE OF
DETERGENTS PURCHASED BY CONSUMERS IN NAKURU COUNTY,
KENYA**

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Fulfillment of the requirement for the Award of Master of Business
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DECLARATION AND APPROVAL

DECLARATION

This research project is my original work and has not been submitted anywhere for a degree in any other University.

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ABSTRACT

With the growing liberalization of trade and business in Kenya, many manufacturing firms are now able to produce and bring to the markets broad varieties of products. On the other hand consumers have become more knowledgeable and are seeking lot of information before purchase and consumption of products and services. In detergent market particularly, manufacturers are nowadays increased due to the level of increased demand for detergents induced by the improved lifestyles of the consumers, such that competition has become more stiff. For these reasons the firms are now putting more effort in mode of packaging of their products. Therefore, the study intended to empirically examine the influence of packaging attributes on detergent choice by the consumers in Nakuru. In achieving this general objective the study sought to examine the extent to which colour of the package, material of the package, size of the package and package label influences consumers' choice of the detergent. Structured questionnaire was used to gather primary data from various consumers in Nakuru. Study sample size was 222 consumers, which was being selected using a multistage sampling which entailed stratified random and convenience sampling. Multiple regression analysis was used to test the relationship between variables under study whereas spearman's correlation was used to test research hypotheses at 0.05 significant levels. The study findings were presented using frequencies distribution tables and percentages. The finding of the study shown that Colour of the package had a significant influence consumer choice which had a p- value of (0.000) which is less than alpha 0.05. Packaging material had no significant influence on consumer choice ($p=0.067$) which is greater than alpha 0.05. Size of the packaging had no significant influence on detergent consumer choice ($p=0.664$) which is greater than (alpha 0.05). packaging label had significant influence on consumer choice ($p=0.006$) which is less than (alpha 0.05). The results are expected to give insight to detergent manufacturer and marketers in improving product presentation. Attributes of packaging contributes only 32% of the consumer choice of the detergent. There is need for further research to identify other variables that affect consumer choice that would contribute to the 68% not accounted for by this study. There is need for further research to identify other variables that affect consumer choice of the detergents that would contribute to the 68% not accounted for by this study. The study also contributed to the existing knowledge in aiding scholars understand the influence the packaging attributes has on consumer choice thus forming their basis for further research.

Key words: *product packaging attributes, consumer choice, packaging colour, packaging quality of material, packaging size variety, packaging label*

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CHAPTER ONE

INTRODUCTION

1.1 Back ground of the study

Without the knowledge of how a consumer behaves firms cannot take appropriate measures to meet the requirements and needs of the consumer (Hawkins & Coney, 2004). Consumers' behaviour consists of knowledge and emotions that people experience and the actions they perform during consumption. It also includes some elements of the environment that influence the knowledge, emotions and behavior. Consumers have dynamic behavior since knowledge, thoughts, emotions and the behavior of the consumer individually, and the target groups of consumers and the society keep changing. The dynamic nature of the consumer behavior makes the development of marketing strategies difficult.

Consumer behavior according to American Marketing Association includes Dynamic interaction of influence, recognition, behavior, and the environment that people exchange in their lives. Consumer behavior consists of the interaction of thoughts, emotions, behavior, and the environment. With that, marketing agents need to know what products and trademarks are meaningful for the consumer, how the consumer purchases, and what factors influence purchase and consumption. In addition, consumer's behavior includes the interaction among humans. It means that the people give a valuable item in exchange of another item (Hawkins & Coney, 2004).

Packaging is an element mingled with the product which means every person such as a manager and experts in marketing, other people who wants to study an organization and its products, needs to study and examine the different methods and kinds of product packaging of that institution. This examination can be made in two aspects such as of protection and information. Shape, packaging, color and design are important elements in the examination of goods. The combination of these elements constitutes the superficial goods in the eyes of the consumer (Silaloy & Spice, 2004). Product packaging helps in identifying of brand (Klimchuk & Krasovec, 2007) and help to highlighting and promoting the products.

Packaging could be the final advertisement tool to inform, persuade and convince the consumer before final purchase decision (Well, Moriarty & Burnett, 2006). Studies show that many new products are bought through impulse buying.

In today's business environment, there are large numbers of companies which deliver the identical products in the markets. Consumers encounter thousands of brands in single visit to market. In this kind of competitive environment packaging become effective tool to capture the consumer purchase intention (Ranjbarian, 2009). Consumer faces experience of more than 10000 products in single visit to supermarket in 30-minute shopping session (Belch & Belch, 1999). In such a competitive environment packaging help to differentiate the product or achieve competitive edge (Klimchuk & Krasovec, 2007). In addition, packaging is the fifth element in the marketing mix, it has become itself a sales promotion tool for the organizations. Consumer's buying is also stimulated by the packaging quality, color, wrapper, and other characteristics of packaging. Packaging is a whole package that becomes an ultimate selling proposition, which may stimulates impulse buying behavior.

According to (Nilsson & Ostrom,2005) graphic includes name, typography and structure design include size of packaging or products. Packaging has become a useful for marketers to capture customer attraction and get competitive advantage over the competitors. According to (Klimchuk & Krasovec, 2007) the product packaging and product design are positively correlated). According to (Nilsson & Ostrom, 2005; Ampuero & Vila, 2006; Klimchuk & Krasovec, 2007) packaging design has three dimensions, graphic design, and structure design and product information. In graphic design there are four sub dimensions; brand name, typography, image and color. In structure image there are three sub-dimensions; shape, size and material.

Color of packaging is important because it differentiates the firm's products from other companies products. Packaging color attracts more attention the customers. In the current competitive environment companies are using different packaging color to attract and remind the consumer. Font style is print on the packaging. Color of the package and brand design enhance visual stimuli, is also considered an important tool for creating and sustaining the brand and make the corporate image in the consumers' minds. Packing shape and size have an impact on a consumer's purchasing decision. Mostly consumers are attracted with that product which can use easily and carry (Silayoi &Speece, 2004).Font style appeal to the customers perception, such that those companies which uses best font style capture market

successfully. There are three type of perception, Some aesthetic or Hearing visual, Gustative and Kinesthetic perception. (Gallen & Sirieix, 2007).The children pay more attention on design of wrapper, so organization design the wrappers which will attract children as well. The information should catch the consumers and have huge effect on young adults and buying attitude. Printed information provides detail of the product how the product is made, how to use and how to dispose it. Due to enhancing the competition in daily life so the product packaging has come to play a more important role as a brand communication vehicle. Packaging decision should be considered first when designing a marketing plan for total marketing strategy (Panwar, 2004).

Taleghani (2011) shown that service quality, usage and above that, storage, have impact on consumer satisfaction. Consumer satisfactions lead to repurchase of the product of that brand. Rentie & Brewer (2000) shows that more than 73%of purchase decision is depend on the product storage, they purchase of product dependent on the product environmental safety. Therefore, Package material is also an important aspect of the product which consumers considers when making purchases (Schoell, 1985).

Packaging is a whole package that becomes an ultimate selling proposition, which stimulates impulse buying behavior. Packaging increases sales and market share and reduces market and promotional costs. According to Rundh (2005) package appeals consumer's attentiveness and interest towards a certain brand, increases its image, and stimulates consumer's perceptions about product. Furthermore, packaging conveys distinctive value to products (Underwood, 2003; Silayoi, & Speece, 2007), packaging works as an instrument for differentiation, and helps consumers to decide the product from wide range of parallel products, packaging also stimulates customer's buying behavior (Wells, Farley & Armstrong, 2007).

Rundh (2005) shows that package attracts consumer's attention to particular brand, enhances its image, and influences consumer's perceptions about product. Brand image and advertisement have strong positive influence and significant relationship with Consumer's buying behavior. People perceive the brand image with positive attitude; the brand image is created through packaging which imparts unique value to products (Underwood, Klein & Burke, 2001; Silayoi & Speece, 2004) apart from working as a tool for differentiation. Thus package performs an important role in

marketing communications and could be treated as one of the most important factors influencing consumer's purchase.

However, previous studies show that there is no agreement on overall classification of packaging material and package elements. There is also disagreement regarding the methods of package impact on consumer's buying behavior decision. Several studies attempt to examine few potential elements of packaging and their effect on consumer's buying decision (Butkeviciene, Stravinskiene, & Rutelione, 2008), others focus on distinct elements of packaging and their influence on consumer purchasing behavior (Ampuero & Vila, 2006; Madden, Hewett & Roth, 2000; Underwood, Klein, & Burke, 2001; Bloch, 1995).

1.2 Problem statement of the study

In the existing competitive environment the role of package has changed due to increasing self-service and changing consumers' lifestyle. Firms' interest in packaging as a tool of sales promotion is growing increasingly (Ranjbarian, 2009). Package becomes an ultimate selling proposition stimulating impulsive buying behaviour, increasing market share and reducing promotional costs. However, despite the heavy investments by firms on improving and developing attractive and innovative packaging for their products, it remains unclear the extent to which such initiatives influence purchase choice among consumers. Previous studies conducted in the area have focused on other roles of product packaging such as saving, handling and storage of particular products (Underwood, 2003; Silayoi, & Speece, 2007), with little emphasis on how different attributes of packaging influences consumer purchase choice. Hence, the study investigated the influence of detergent packaging on choice of detergent among consumers Nakuru County, Kenya. The study was be useful in determining the relationship between product packaging and purchase choices among consumers in Kenya.

1.3 Objectives of the study

1.3.1 General Objectives of the Study

To examine influence of packaging attributes on choice of detergents purchased by consumers in Nakuru County.

1.3.2 Specific objectives of study

- i. To establish the effect of packaging colour on choice of detergent purchased by consumers in Nakuru County, Kenya.
- ii. To examine the effect of quality of packaging material on choice of detergent purchased by consumers in Nakuru County, Kenya.
- iii. To determine the effect of packaging size variety on choice of detergent purchased by consumers in Nakuru County, Kenya.
- iv. To establish the effect of packaging label on choice of detergent purchased by consumers in Nakuru County, Kenya.

1.4 Research Hypotheses

H₁₀: There is no significant relationship between Packaging colour and choice of detergent purchased by consumers in Nakuru County, Kenya.

H₂₀: There is no significant relationship between Packaging material and choice of detergent purchased by consumers in Nakuru County, Kenya.

H₃₀: There is no significant relationship between Packaging size and choice of detergent purchased by consumers in Nakuru County, Kenya.

H₄₀: There is no significant relationship between Packaging label and choice of detergent purchased by consumers in Nakuru County, Kenya.

1.5 Scope of the study

The study focused on supermarkets, within Nakuru CBD. The study was carried on a sample of the customers who were in the store on the day and time of data collection. The study was carried out among supermarket shoppers in Nakuru County who are mainly involved in the purchase of household consumer goods. The study period was conducted in three months (July, August and September- 2016)

1.6 Limitations and delimitations of the study

A variety of issues impacted the study. The respondents were unwilling to answer questions since some considered that unnecessary. The researcher took the necessary steps and measures to ensure that proper communication was made on the purpose of the study and assured that respondents took the least time possible in answering the questionnaire; this was enabled by a questionnaire with few straight forward questions.

The findings may not be generalized to all consumers in Kenya, since it was carried out in Nakuru county generalization of results was threatened. This was overcome by selecting respondents randomly to ensure validity and reflect diversity.

1.7 Significance of the study

The study examined the influence of packaging attributes on choice of detergents purchased by consumers in Nakuru County. This information is vital to the manufacturers as they make packaging decisions. It will assist them in knowing which element of packaging to emphasize on. It assists marketers and especially marketing managers to constantly improve their understanding of customers and assist in making marketing strategy.

The study will assist in making better consumers by building on one's own, ability to be a more effective consumer for example on what information to look out for on a package during their shopping session, importance of packaging and the safety of the products that they purchase.

The information obtained from the study would also be useful in supporting future academic studies related to product and consumer buying behavior by providing related reference materials. The study contributed positively to the existing body of knowledge on Consumer analysis which provides knowledge of human behavior, consumer orientation and theories to guide the thinking process.

1.8 Justification of the Study

Manufactures in detergents industry have increased currently likely due to induced demand by consumers changing lifestyle. Initially, consumers were not keen with the detergents they were purchasing such that they could purchase a detergent which was used for all purposes at homes and in offices but currently, many consumers are purchasing a detergents for each different use e.g laundry, toiletry, dish washer e.t.c. Hence it would be important to investigate the impact of packaging attributes on detergents choice.

1.9 Definitions of operational terms

Consumer behavior- this is the Process by which individuals search for, select, purchase, use, and dispose of goods and services, in satisfaction of their needs and wants. Its "The study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society." (Kotler,2010).In the study ,consumer behaviour means the purchase choice of the detergent made by the consumer.

Consumer- The shopper and end user of the detergent.

Detergents- A detergent is a chemical substance you use to break up and remove grease and grime. Detergents includes: bar soaps, liquid washing solution, paste and washing powders used for cleaning and laundry. (Woodford, 2016).In the study ,detergents include liquid soap, powder soap and bar soaps.

Package labeling-is any written, electronic, or graphic communication on the product package. Labels range from simple tags attached to products to complex graphics that are part of the package.

Packaging attributes- elements of packaging of the detergents. According to (Keller, 2009) aesthetic elements or components of packaging include size, color, text, graphics, material and shape. In the study, packaging attributes are the different dimensions of detergents packaging.

Packaging colour- this is shades of hue as used for the product package. (Brewer 2004).In the study this include the colour of the detergent package.

Packaging quality of material- this is the type of material and texture of the wrapper of the product. (Keller, 2009).In the study, it include the material of the package such as plastic, metallic or polythene paper.

Packaging size variety- this is the quantity of the content in the product package. (Keller, 2009).In the study ,it include the different sizes of detergent,small sized and large sizes.

Product Packaging –Packaging involves designing and producing the container or wrapper for a product. Product packaging is any kind of dish or package within which the product is offered for sale in the market or by which the necessary information about the product is transferred to the consumer. Packaging in modern terms can be defined as the designing and producing containers and wrappers for a product (Keller, 2009).In the study it means the wrapper of the detergent.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter entails the theories of consumer behavior, empirical studies, conceptual framework and the research Gap.

2.2 Theoretical framework

2.2.1 Behaviourist Approach

In 1920 Watson published a landmark study into behaviour which became known as 'Little Albert' (Watson & Rayner, 1920). This study involved teaching a small child (Albert) to fear otherwise benign objects through repeated pairing with loud noises. The study proved that behaviour can be learned by external events and thus largely discredited the Psychodynamic approach that was predominant at the time. Essentially behaviourism is a family of philosophies stating that behaviour is explained by external events, and that all things that organisms do, including actions, thoughts and feelings can be regarded as behaviours. The causation of behaviour is attributed to factors external to the individual. The most influential proponents of the behavioural approach were Pavlov who investigated classical conditioning, Watson who rejected introspective methods and Skinner who developed operant conditioning. Each of these developments relied heavily on logical positivism purporting that objective and empirical methods used in the physical sciences can be applied to the study of consumer behaviour (Eysenck & Keane, 2000).

There are a number of branches of research that conform to the major tenets of behaviourism, but differ subtly in other ways. Initially 'Classical Behaviourism', established by John Watson, required the entirely objective study of behaviour, with no mental life or internal states being accepted. Human thoughts were regarded by Watson as 'covert' speech (Sternberg, 1996), and strict monism was adhered to (Foxall, 1990). Between 1930 and 1950 Skinner founded 'Radical Behaviourism' which acknowledges the existence of feelings, states of mind and introspection, however still regards these factors as epiphenomenal (Skinner, 1938); (Nye, 1979).

The assumed role of internal processes continued to evolve in subsequent decades, leading to more cognitive approaches with a new branch of study 'Cognitive Behaviourism' claiming that intrapersonal cognitive events and processes are

causative and the primary irreducible determinants of overt behaviour (Hillner, 1984). Stimulus-Organism-Response Model of Decision Making Stimulus Organism Response Source: (Cziko, 2000). While there are distinct branches of cognitive psychology, they all share an abiding interest in exploring and understanding the mental structures and processes which mediate between stimulus and response (Kihlstrom, 1987). Contemporary Cognitive Psychology has identified and developed a wide range of factors which are thought fundamental to these intrapersonal processes including: perception, learning, memory, thinking, emotion and motivation (Sternberg, 1996). Early Stimulus-Organism-Response models suggest a linear relationship between the three stages with environmental and social stimuli acting as external antecedents to the organism. This approach assumes that stimuli act upon an inactive and unprepared organism (Eysenck & Keane, 2000). Most modern theorists now, however, acknowledge that information processing is conducted by an active organism whose past experience will influence not only the processing of such information but even what information is sought and received.

Information processing will be both stimulus driven and concept driven (Moital, 2007); (Groome, Dewart et al. 1999). This development has resulted in more recent depictions of consumer decision making being circular in fashion or drawn through a Venn diagram (Jacoby, 2002).

Despite coming from a Radical Behavioural perspective, Foxall (1990) identifies four key strengths of cognitivism as a means of explaining consumer behavior: Its closeness to the common-sense explanations of everyday discourse make it an intuitively attractive means of offering explanations of everyday behaviours such as purchasing and consuming; The ability of consumers to describe their experiences in terms of their attitudes, wants, needs and motives ensures that an explanation proceeds in the same terms as the description of what is explained; It brings a measure of unity and consensus to a still young field of inquiry; The extensive use made by other social science and humanity disciplines of cognitive explanation has assisted the conceptual development of this line of consumer research by making possible the borrowing of theoretical and methodological inputs. The theory will be relevant explaining study objective one, the colour of the product packaging will raise different feelings and thoughts to different consumers, such that the consumer will relate a different colour to beliefs and personality.

2.2.2 Cognitive Approach

The cognitive approach ascribes observed action (behaviour) to intrapersonal cognition. The individual is viewed as an 'information processor' (Ribeaux & Poppleton, 1978). This intrapersonal causation clearly challenges the explicative power of environmental variables suggested in behavioural approaches, however an influential role of the environment and social experience is acknowledged, with consumers actively seeking and receiving environmental and social stimuli as informational inputs aiding internal decision making (Stewart, 1994). Like for example, the consumer will seek the information on ingredients of a product from its package.

The Cognitive approach is derived in a large part from Cognitive Psychology which can trace its roots back to early philosophers such as Socrates who was interested in the origins of knowledge (Plato, 360 B.C.), Aristotle who proposed the first theory of memory (Aristotle, 350 B.C.) and Descartes who explored how knowledge is represented mentally in his *Meditations* (Descartes, 1640); (Sternberg, 1996). It was not until the middle of the 21st Century however, that Cognitive Psychology truly emerged as a mainstream and useful field of study with the development of the Stimulus-Organism-Response model by (Hebb, 1950). From this point many writers suggested that Cognitivism had taken over from Behaviourism as the dominant paradigmatic approach to decision research (Furedy & Riley, 1987).

However, the cognitive approach is also criticised for a number of reasons. Such that, cognitivism assumes the consumer is rational, discerning, logical and active in decision making; assumptions that have been questioned by a number of writers (Bozinoff, 1982) (Solomon & Bamossy, 2006); (Schiffman, 2007). Despite these criticisms, a cognitive approach is more appropriate in the examination of ethical purchasing behaviour. Firstly, the complexity of such actions cannot be accommodated through behavioural models and secondly, the benefits of ethical consumption are largely vicarious in nature, requiring extensive intrapersonal evaluation. Key existing studies into ethical purchasing have all accepted the role of intrapersonal examination (Hines & Ames, 2000; Nicholls & Lee 2006). This theory was relevant specifically study's objectives four. The packaging of a product has labels which act as a source of knowledge to the consumer. The consumers read through the information given on the labels which aid their decision making

2.2.3 Consumer Decision Model

Engel, Kollat & Blackwell(1968) developed the Consumer Decision Model (also known as the Engel-Blackwell-Miniard Model) which has gone through numerous revisions. The model is structured around a seven point decision process: need recognition followed by a search of information both internally and externally, the evaluation of alternatives, purchase, post purchase reflection and finally, divestment. These decisions are influenced by two main factors. Firstly stimuli is received and processed by the consumer in conjunction with memories of previous experiences, and secondly, external variables in the form of either environmental influences or individual differences. The environmental influences identified include: Culture; social class; personal influence; family and situation. While the individual influences include: Consumer resource; motivation and involvement; knowledge; attitudes; personality; values and lifestyle (Blackwel & Miniard ,2001). The consumer choice of the product may be influenced by the colour of the package and the personality, lifestyle, attitude the consumer has about the colour. The size of the package should be in line with the values and life style of the consumer.

Decision making view: This view suggests that the consumers are rational. When considering the decision making view of purchase, we find that the consumers first find out a problem and during some steps they try to solve it rationally. These steps include problem identification, research, evaluation, choosing, and after -purchase evaluation.

Experimental view: The experimental view of the consumer purchase process suggests that the consumers sometimes do not purchase based on rational decision making. Rather, they sometimes purchase goods or services only for enjoyment, imagination, excitement, and emotions. Behavioral effect view: The behavioral effect occurs when strong environmental forces drive the consumer to buy a product without strong pre -shaped emotions or beliefs. At this time, the purchase results from the direct influence of behavior through environmental forces including the means of sale promotion, cultural norms, physical environment or economic stresses (Schiffman, 2007). This theory was be relevant to study's all objectives because packaging attributes aid the consumer in purchase decision.

2.3 Review of Empirical Studies

2.3.1 Packaging colour and choice of a product

Colors in the package design on products influence customers, different colors have different themes, Sometime the consumer makes decision of purchase on the base of some particular color because people or some person associate some particular color and they prefer that colour (Madden ,2000). An attention capturing color helps to consumer to visually see and differentiate the competitive brand (Nilsson & Ostrom, 2005).

Currently, consumers are experiencing a lot of products when they visit the supermarket but he only purchases those products whose colors attract their attention. Color of packaging has different meaning such as a green color show the natural, secure relaxed or easy going. Red colors indicate the human excitement, hot, passionate and strong. Orange colors represent the power, affordable and informal. Brown colors show the informal and relaxed masculine nature whereas white color indicates goodness, purity, cleanliness, refinement and formality. Black color power authority and mystery. Consumer often perceived the quality by using or relating the color (Leichtling, 2002).

Consumer take different meanings of different color and it relate the color with their beliefs and preferences (Lichtle, 2002). A color becomes cause to effect the consumer perception towards the price. For instance an orange color is perceived more incorrect twice than blue color of cloths in shop (Babin , 2003). Roullet (2004) shows the effect of different color over consumer perception towards the quality, price and consumer attraction. His major studies were over medicines products, the use of brown, red or orange color require special safety guidelines, the former represent the treatment of sophisticated diseases, quickly in action and high price than blue, green and yellow. Colour is an integral part of products, services, packaging, logos, and other collateral and can be an effective means of creating and sustaining brand and corporate images in customers' minds. Thus colour and its meanings have been well examined by marketing and psychological research.

Keller (2009)color is an essential component of visual elements of packaging to the extent that some designers are of the view that consumers possess color vocabulary due to which they expect certain type of colors for particular products. Colors could

bring a point of difference to a brand and the brand can have some color ownership which other brands cannot copy or it becomes difficult for them to have the same look (Keller, 2009). According to (Keller, 2009) color is an important element of visual design of packaging and the information and meaning it conveys should be consistent with what other marketing programs are conveying. Color perceptions vary across cultures and most of the religions are believed to have their sacred colors (Singh, 2006). Consumers have color memory which they relate to certain brands in which when they recall a particular color they associate it with a certain brand. In addition, changing demographics and trends change the color preferences of consumers (Singh, 2006).

Packaging color of a product has a high intensity to elicit purchase behaviour in consumer (Mutsikiwa & Marumbwa, 2013). Each product has a distinct packaging color and it should be matched with the product category of the product in order to create an impact of packaging color on consumers and to trigger purchase behavior (Mutsikiwa & Marumbwa, 2013).

An associative learning framework can be used to explain human physiological response to colour. Researchers have suggested that colour associations may have been formulated early in human history when man associated dark blue with night, and therefore, passivity and bright yellow with sunlight and arousal. To this day, cool colours, such as blue and green, are considered calming and warm colours, such as red and orange, are considered arousing (Grossman & Wisenblit, 1999). Because colours have specific meanings associated with them, colours are important image cues.

The meanings of colours may also have implications for the associations that consumers make about a brand's position in the marketplace. Certain colours manifest cultural meaning associations. Strategic use of these colours affords opportunities for products, packages, logos, and the like to convey specific images associations across national markets (Madden, Hewett & Roth 2000). Singh (2006) discusses colour, mentioning that colour in advertising serve a variety of specific purposes. Colour is used for a variety of specific purposes. It creates moods, it draws attention, it emphasizes, and it intensifies memorability.

Singh (2006), claims that the primary function of colour in advertising is to help create mood and emotional responses. In packaging, the first objective of the colour is to command the eye. It has to be seen, to jump of the shelf, if it is to survive the intense competition of the self-service environment. The notion that colour preferences are formulated through associations is of critical importance to marketing practitioners interested in determining colours for products. Rather than examine general colour preferences among consumers, it may be preferable to learn consumers' colour associations as a basis for understanding the emotional aspects of colour. For example, Marketers can also use the theory of associations to create meanings for particular colours or to develop a brand image around a colour (Grossman & Wisenblit, 1999).

The study of colour is complex, and made difficult by variety of systems, which include the aesthetic psychotically, physiological, associative, and symbolic(Singh, 2006) colour has an extraordinary power to move emotions. Singh (2006) asserts that colour has become the subject of considerable investigation by psychologist; this has expanded to other field of study that has relationship with the study of human behavior like marketing. This discovery has led to psychological attributes of colour as well as an awareness of its socioeconomic dimensions.

Colour studies begin with the interaction of light and colour for without light we would not observe no colour, shape, space. The understanding of light colour was aided by Sir Isaac Newton discoveries that white light contain all visible colour. Keller(2009)points out that discriminate millions of different colours; there are only 150 discernible wavelengths in spectrum, the average person can, with reliability name only a dozen or so, and even change with individual mood and association. In certain circumstance colour has been seen in the absence of light; that is, electrical and mechanical stimulation on the optic nerve can induce colour sensation, as can various chemical change .Keller(2009)It has been demonstrated that touch alone can discriminate parts of the electromagnetic spectrum, including colour; this is known as demo-optical perception (DOP) a theory based on radiant energy (Youtz, 1996).

Youtz (1996) reported that the ways of seeing colour is by hearing, taste, and smell collectively, these alternative means are known as synaesthesia. This of course assumes that one is not colour blind as is the case with 6-9% of males and 8% of

female (Ghoethe, 1982). There are differences in the perception of colors between genders. Khouw (2002) found that men were more tolerant of gray, white or black than women, and that women reacted to the combinations of red and blue more frequently, and got confused and distracted more than men. It was also found that the combination of red and blue was the most preferred color by adults. These results suggest that there are gender differences in the perception of color. True, the subject's impressions of color seemed to be more subtle and effected not just by the coolness or warmness of the color palette, but also by the calibration of value, chroma, and contrast used in the interiors (Khouw, 2002).

2.3 .2 Quality of packaging material and choice of a product

The history of the use of package materials is as old as man. Early packaging materials to be used include the leaves, animal skin, pottery vessels, and woven bags. However, these have evolved to processed materials such as plastic bottles and papers, wooden vessels, corrugated boxes, metal containers and others. Twede (2005) says that the earliest recorded use of paper for packaging dates back to 1035, when Persian merchants bought vegetables, spices and hardware which were wrapped in paper in Cairo, Egypt.

According to Twede (2005) a host of significant innovations in packaging design were pioneered in the military for the purpose of distributing and storage of material, supplies and foods to match the quality requirements. In the marketing field, product package design has evolved to become a critical ingredient for building the equity of the brand over and above influencing consumer purchasing decision. Rettie & Brewer (2000) argue that the package design has become a fundamental avenue for communicating significant brand attributes and as such it can be employed as competitive too. In recent times, people are becoming more concerned towards green purchasing because of a grown consciousness for environmental protection. Green purchasing is essentially the act of buying environmental friendly products through the use of the product including its disposal. Consumer like the material of package which is environment friendly (Smith, 1993; Shimp, 2000).The quality of the package should be easy in its disposal.

Like other visual elements of packaging materials also communicate and consumers associate certain intrinsic values with the material of a product (Smith, 2004). In

addition materials also affect the perceived quality of a product, which means consumer perceptions regarding certain materials could change the perceived quality of a product. Some packaging materials are to be made in a way, so that it could bear the temperature below zero or high temperatures in microwave depending on the product functionalities and the needs of a consumer (Smith, 2004). In one study on milk packaging Rettie & Brewer (2000) discussed three packaging materials were discussed which includes glass, plastic, and cardboard. Customers have different perceptions of packaging about different packaging materials. Many advocate the use of glass packaging material in milk packaging, but then said that it was heavy and it used to be washed after it is used.

Regarding cardboard packaging consumers had negative views about it and they said that this type of packaging do not keep a product fresh and one also cannot see the product and they referred this kind of packaging to UHT treated milks (Rettie & Brewer, 2000). Participants in that study advocated the use of plastic containers and agreed that such containers were better than cardboard and glass packaging because their screw top cap prevented the product and were less likely to leak (Lynsey, 2013). All that material which are often used in package design and structure have effect on the consumer emotions, perception to quality and buying behavior.

Functional package characteristics such as convenience of use, design and aesthetics have been in the forefront. Only recently have the environmental consequences of packaging and the amount of household waste become a household waste and discarded products form the biggest environmental problems in the field of consumption worldwide, but it has proven difficult to change consumption patterns and basic structures that support them (Prendergast, 1997; Thøgersen, 1999). For example, the self-service retailing of food products inevitably means an increase in packaging waste. The importance of the waste problem suggests that environment-friendliness of product packaging should be added into consumer choice models as a relevant product attribute. Most of the research so far has been related to waste production and disposal at the aggregate level, or to consumers' recycling behaviours (Thøgersen, 1994).

There are reasons why consumers fail to choose environment-friendly packaging, despite favourable attitudes, are largely the same as for the environmental product

choices in general. Congruent with this, Thøgersen (1999) suggests that moral reasoning is likely in the choice of product packaging only when environmental impacts are perceived considerable and there are no other important characteristics involved in the particular purchasing situation.

Many consumers fail to understand the connection between their buying decision and various environmental consequences if there is no environmental information, such as labels, to remind them of it. Other reasons include the lack of supply of environment-friendly packaging options in the marketplace and consumers' inability to distinguish between the more and less environment-friendly package alternatives (Thøgersen, 1996). Often consumers also undervalue the impact of their own 'marginal' contribution to the problem personal norms improve the likelihood to choose such environment-friendly packages in the supermarket. Thøgersen(1999) adds that personal norms often depend on how widely accepted such norms are in society and whether social norms are supported by positive or negative sanctions. Favourable environmental attitudes alone will not predict behaviour if the social norms are too weak or individuals are not aware of them.

Shad, Ahmad & Ahmad (2013) concluded that packaging material have significant relation with consumer choice. According to them packaging material is important element which prevents the product from loss. (Sial, et al .2011) concluded that packaging has a positive relationship with the buying behaviour of young customers.

Thus, information about how other people actually behave, and about the social benefits of behaving according to the social norm, is needed to encourage consumers to collaborate. If a consumer learns that the majority of other consumers avoid buying no recyclable bottles and recycle bottles, the consumer is more likely to adopt that kind of behaviour. Moreover, incentives such as charges on non-recyclable packages will further strengthen the norm and influence also those consumers that are unwilling to cooperate.

The primary interest of packaging research has focused on communicative characteristics of the package labelling, functionality, colour, size (Silayoi and Speece, 2007). In a few cases where environmental packaging has been an issue, the studies indicate that functional packaging characteristics influence consumers' purchasing decisions, whereas environmental characteristics do not seem to have any

practical importance. However, Thøgersen,(1999) suggests that there might be a group of consumers – albeit small – with strong preferences for green packaging, and there might be a market for this type of packaging.

2.3.3 Packaging size variety and choice of a product

Mostly people like the products who like products with match personality. If the packaging of product is large but in the original product that in the pack is small first time the customer purchase but next time they not purchase that product again (Vila, 2006). Previous research suggest that large pack of product provide better value as compare to small pack (Vila, 2006). Consumption or frequency of use of a product increases when packages are redesigned or available in larger sizes (Kotler, 2008). Packaging size depends on products features and the target market (Smith, 2004). Larger pack sizes convey better quality (Smith, 2004) and increases impulse consumption (Keller, 2009).

An investigation done by (Rundh, 2013) on customer requirement of packaging shows that change in the size of household in effect changes the product size. An investigation done on the size attribute of packaging (Arun , 2012) shows that different packaging size is way to extend a product into new markets. Another study on packaging size shows that smaller packaging size are considered by consumer of smaller family and that the large size of packaging communicated the waste of product for them (Pinya, 2004) This was also found true in another study that consumer's willingness to buy a product increases if products are presented in smaller packages and if products have shorter expiry date then consumers do not prefer large package sizes (Golnesa,2013). Market demand also suggests that due to smaller households products are to be bought in smaller packages (Rundh, 2005).

In particular, perceived assortment variety can be viewed as a function of two key factors: assortment size and assortment structure. Assortment Size and Perceived Assortment Variety The basic notion that perceived variety is a function of assortment size is fairly straightforward. Larger assortments tend to be perceived as having greater variety. The research in this area has focused on identifying factors that moderate the impact of assortment size on choice. Pinya(2004)documents that perceptions of variety in a given assortment are influenced by three key factors: the number of distinct items comprising the assortment, the assortment's attractiveness

,the availability of buyers' favorite brands, and the total shelf space allocated to the assortment.

In particular, they show that removing a more preferred item has a greater likelihood of lowering an assortment's perceived variety than removing a less preferred item. They further report that a decrease in the shelf space allocated to a category tends to lower this category's perceived variety. Thus, when a product category is given more shelf space in a retail store, even when the number of distinct items is constant, consumers perceive greater variety than when the same category is assigned to a smaller space. Herpen & Pieters (2002) show that doubling the size of an assortment with replicates can increase perceived variety by as much as 42%.

In addition to assortment size, perceived variety is a function of assortment structure, that is, the organization of the items within a given assortment. Three key aspects of assortment structure can be identified: (1) the degree of distinctiveness of the options, (2) the entropy of the options comprising the assortment, and (3) the organization of the assortment (Hoch et al., 1999; Kahn and Wansink, 2004). The degree of option distinctiveness refers to the attribute-level differences between individual items. Existing research has shown that perceived variety of an assortment is a function of the magnitude of the differences between its options, such that perceived variety is smaller in assortments comprising similar rather than dissimilar options (Hoch et al., 1999; Herpen & Pieters, 2002, 2007; Ryzin & Mahajan, 1999). It has further been documented that the impact of option distinctiveness on perceived variety is independent of the number of items comprising an assortment. Thus, the distinctiveness of options' attribute values only moderately correlates with assortment size with respect to its impact on perceived assortment variety and can be used as an independent predictor of assortment variety (Herpen & Pieters, 2002).

Consumption or frequency of use of a product increases when packages are redesigned or available in larger sizes (Kotler & Keller, 2008). Packaging size depends on products features and the target market (Smith & Taylor, 2004) Larger pack sizes convey better quality (Smith & Taylor, 2004) and increases impulse consumption (Keller, 2009) An investigation done by (Rundh, 2013) on customer requirement of packaging shows that change in the size of household in effect changes the product size.

An investigation done on the size attribute of packaging by (Broniarczyk ,1998) shows that different packaging size is way to extend a product into new markets. Another study on packaging size shows that smaller packaging size are considered by consumer of smaller family and that the large size of packaging communicated the waste of product for them (Silayoi & Speece, 2004).This was also found true in another study that consumer's willingness to buy a product increases if products are presented in smaller packages and if products have shorter expiry date then consumers do not prefer large package sizes (Ahmadi et al., 2013).Market demand also suggests that due to smaller households products are to be bought in smaller packages (Rundh, 2005).

The product-based approach focuses on the dissimilarity of the options across all attributes (Hoch et al., 1999, 2002). In contrast, the attribute-based approach focuses on the similarity of the attribute levels across alternatives, as well as on the relationship between different attributes (Herpen & Pieters, 2002). The two approaches can be related to conceptualizing the degree of option distinctiveness in terms of integral or separable attributes (Garner, 1974).The entropy of an assortment is a metric of the dispersion of its items, which incorporates both the number of different items and their relative frequencies into a single measure of variability (Kullback, 1959; Young & Wasserman, 2001).

When describing the variety of an assortment, the term entropy has been used in two similar contexts: (1) as a measure of the dispersion of attribute levels within an attribute (Herpen & Pieters, 2002) and (2) as a measure of the dispersion of the frequency with which each option appears in a given assortment (Kahn &Wansink, 2004; Shannon & Weaver, 1949). Thus, entropy is highest when all attribute levels occur in equal proportions or when all options occur with equal frequency. Attributes/options with lower entropy unique ,features/options are considered more diagnostic relative to attributes/options with higher entropy such as shared values of a given attribute or common options in an assortment.

Recent research has shown that the entropy of the options in an assortment can have a significant impact on the perception of variety. In particular, it has been documented that high dispersion in the attribute values across options leads to increased perception of assortment variety (Herpen & Pieters, 2002). In the same vein, it has

been shown that a higher number of distinct options leads to increased perception of assortment variety (Hoch *et al.*, 1999; Young & Wasserman, 2001). Perceived variety has also been shown to be a function of the organization of the assortment.

Thus, it has been documented that for large assortments, disorganized sets are likely to be perceived as offering less variety than organized sets — an effect attributed to the lack of structure, which makes it more difficult for consumers to recognize the existing variety. In contrast, for small assortments, disorganized sets are likely to be perceived as offering greater variety because they can obscure the fact that the available assortment is fairly small (Kahn & Wansink, 2004). Organized displays also have been reported to be more likely to lead to perceptions of greater variety in the context of analytic information processing, whereas in the context of holistic processing this effect is reversed, such that disorganized displays are perceived to offer greater variety (Hoch, 1999).

Perceived variety has further been documented to be a function of the proximity of the items comprising an assortment. In particular, options in close proximity, adjacent options, have been reported as having greater impact on assortment variety than distant options (Hoch *et al.*, 1999). Perceived variety of an assortment has also been reported to be a function of consumers' familiarity with the product category and the consistency of consumers' internal category schema with the category structure of the product display. In particular, for consumers familiar with the product category, congruency between the internal schema and the external layout was found to lead to greater perceptions of variety (Morales *et al.*, 2005; Mogilner *et al.*, 2008). It has further been shown that experienced consumers are also able to detect subtle, but rich, distinctions within an assortment, further increasing their perceptions of variety (Redden, 2008). Perceived variety is a function of the distinctiveness of the options comprising an assortment. In particular, assortments comprising more distinct options are perceived to have greater variety than assortments comprising options that are more similar. Perceived variety is a function of the entropy of the options comprising an assortment.

In particular, high dispersion in the attribute values across options (high-attribute entropy), as well as a higher number of distinct options (high option entropy), leads to increased perceptions of assortment variety: The proximity of items is likely to

influence the perceived variety of an assortment. In particular, options in close proximity to adjacent options have greater impact on assortment variety than distant options. Perceived variety is a function of assortment size, such that increasing assortment size by adding either distinct items or replicates will increase perceived variety. (Redden, 2008). The marginal impact of increasing assortment size on perceived variety will be greater when the added items are distinct than when they are replicates and will diminish with an increase in the number of distinct options comprising the assortment.

The impact of assortment size on the perceived variety is a function of the organization of the options in the assortment. In particular, for small assortments, low organization is likely to lead to a perception of higher variety, whereas for large assortments, low organization is likely to lead to a perception of lower variety. The impact of organization on an assortment's perceived variety is a function of the nature of consumer decision strategy. In particular, consumers processing the information (Redden, 2009).

Assortment Structure and Perceived Assortment Variety: Analytic fashions are likely to perceive organized assortments as offering greater variety than non organized assortments. In contrast, consumers processing the information in holistic fashion are likely to perceive non organized assortments as offering greater variety than organized assortments. The impact of organization on an assortment's perceived variety is a function of the nature of consumer expertise. In particular, congruency between the internal schema and the organization of the assortment was found to lead to greater perceptions of variety.

2.3.4 Packaging labelling and choice of a product

Labeling gives a message to a consumer that the product has the features he wants and it is the best from the other brands in the same line of products (Rita, 2009). Sometimes labeling and packaging make consumer think that he really needs that particular product. Many consumers imagine that this product doesn't have what they have seen before. Therefore, many questions are raised at the time of purchasing on the quality of the product if it may have some side effects and so on.

Labeling is everything written on the packaging or any other thing else ranging from simple tag or a designed graphics. It is possible for a label to only contain the brand

name of the product or contain all the information about the use, applications or ingredients of the product (Kotler ,2001). According to the FDA (2007), a product label must contain at least the product's brand name, ingredients, manufacturer's name and address, net weight and other nutritional facts of the product. In any case that the label is not placed in a proper way or not clear to the consumers then there is a possibility that consumer will not purchase that product altogether.

Many firms use packaging and labeling as a tool for attracting the buyers towards the product and increase revenue sales (Butkeviciene et al,2008). Consumers are willing and ready to pay more for the products that have good brand name in comparison to those which don't have a similar brand image. The success of any business brand name is very important (Randall, 1997). Authors have confidence that in this era of globalization and competition the role of the brand is imperative to increase a company's market share. Labeling and packaging increase relationality and confidence among the product user sometime verbal and visual information is sued over packaging, the consumer of milk and washing powder given the preference to verbal information (Kuvykaite, 2009). Consumer pay additional cost for nutritional labeling product due to health consciousness (Pathriaja,2003).

The consumers purchase more quantity of the products, after looking a well-labeled product. Therefore labeling influences the consumer buying behavior, but there are some other factors also, which influence the consumer buying behavior (Saeed,*et al*, 2013). When consumers purchase products, their intention is to use and/or consume the product without any difficulty, thus package instructions act as the manual imprinted with the message on how to maximise the utility provided for by the product. Prior to purchase, consumers search for and evaluate information relating to product usage, expiration dates, ingredients, volume, weight, and disposal (Kupiec & Revell, 2001).

In some countries, governments enforce through an act, the mandatory provision of specific details about the product mainly for health and safety reasons. Package instructions may help consumers to make informed purchase decision (Silayoi and Speece, 2004). With rising levels of consumer education and awareness, it is inevitable for marketers to carefully plan their information display on product packages so as to eliminate confusion and somewhat convince customers at the point-

of-purchase. In the purchase of food products, nutritional information, ingredients, conditions of use and storage instructions are critically important determinants of consumer buying behavior.

Coulson (2000) suggests that many consumers in today's business market pay particular attention to product label information as they have become preoccupied with health and nutrition issues. In the purchase of breakfast cereal products, Silayoi & Speece (2004) argue that the product package displayed in the retail outlet should trigger favourable consumer response, that is, positively influence the consumer's purchasing decision resulting in the actual purchase. The difference between visual package elements and informational elements lie on the proposition that, the essence of visual package design is to arouse and stimulate interest whilst informational elements tend to present information on the actual reason to buy.

As consumers' health concerns and healthy diet are increasing a product should include information, in order to make it easy for consumers to make purchase decisions, which in effect has increased the. Labeling definitions differ and labeling may include a simple brand name, graphic or detailed product information (Kotler, 2008). Packaging layout is very important consideration in providing product information because consumers get confused with the information overload and inaccurate information (Pinya, 2004). Product information is relatively less important to the consumers with their low involvement with the products. On the other hand, consumers with their high involvement with the products tend to look at product information and make appropriate decisions accordingly and the product information could change their attitude of buying the product (Pinya, 2004). Studies have shown that there is a significant relationship between consumer purchase decision and the information on packaging (Parisa, 2013).

Information which is appropriately delivered can have strong impact on consumer buying behaviour which in effect enhances the credibility of a product. Information on the product could help consumers in making their decisions about product choice. Nonetheless, it could also create confusion for them if the information is not accurate or if it is misleading (Pinya, 2004). Consumers read information on the packing when they want to buy an alternative product or if the one they usually buy were out of stock (Lynsey, 2013).

Research in the area of eco-labeling is currently at a stage similar to that of nutritional labeling two decades ago, which provided significant insight the types of people who use nutritional labels, the desired format and detail of information, and the impacts of labels on dietary changes and purchase behavior. This type of research just beginning in eco-labeling, but will likely continue as key stakeholders explore the numerous possibilities for accurate information in a cost-efficient and effective manner. Environmental information on products can be presented on a continuum that ranges from simple symbols, to color codes to other labels with basic information and to detailed environmental information about single or multiple product ingredients. Most consumer products that provide environmental information focus on symbols or logos that attempt to convey an array of environmental information. Unfortunately, consumers must decipher the meanings of these labels, and research indicates that consumers often have difficulty understanding what the labels intend to communicate (Thøgersen,2000). Terms such as “recyclable”, “eco-friendly”, “environmentally safe” are vague and may create cynicism among consumers.

The large number of symbols/labels adds to consumer difficulty in assessing the comparable advantages of different products. Some labels are also incomplete in terms of proving full environmental disclosure. For example, the Energy Star label on washing machines provides information on energy usage but does not include information on water usage, which is another area of critical environmental impact. Although supermarkets stock a wide variety of green products, it is surprising how many products do not clearly communicate their reduced environmental impact.

Given the lack of clear information about positive environmental impact, and the lack of information about negative impact on the environment that results from limited disclosure regulations, consumers are unable to effectively determine the comparative advantage of an eco-friendly product against a similar product that is not eco-friendly. Past research has found that consumers react more favorably to positive attribute messages, relative to negative attribute messages (Beach ,1996; Buda & Zhang, 2000; Johnson, 1987; Levin & Gaeth, 1996) explain these findings as part of a consumer-encoding process in which positive messages evoke favorable memories, while negative messages evoke less desirable associations. Another explanation is the

concept of priming in which the message primes the subject either positively or negatively and this evaluation is transferred to the object (Levin, 1998).

A review of research findings indicates that the negative label has a greater impact on consumers with an intermediate interest in environmental issues than does the positive label. This reflects consumers' sensitivity to keeping things from getting worse, relative to making things better. These findings are consistent with research on nutritional labeling that demonstrated that consumers often use nutrient information to avoid negative nutrients (Abbott, 1997; Hawkes, 2004). People tend to be more sensitive to losses than to gains (loss aversion principle). This stream of research argues that individuals have a strong aversion to losses, and have a greater response to negative messages than to positive messages (Levin et al. (1998) .Levin et al. (1998) suggest that losses have a greater impact on motivation, and thus negative messages will have a greater impact than positive messages. Two potential explanations for this effect are the possibility that negative messages attract more attention or are less common than positive messages (Buda & Zhang, 2000) and thus may receive greater attention (Smith & Petty, 1996). Other authors have made the case that consumers will respond more favorably toward products with no negative attributes (Cole & Balasubramanian, 2002).

Green products, to varying degrees, promote their positive (or less negative) environmental impact while other products fail to disclose their negative environmental impacts (neutral label). The relative consumer evaluation is unclear. Research shows that consumers continue to have guarded impressions of the quality of environmental products (Esty & Winston, 2006; D'Souza et al., 2007), often believing that in order for a product to be green there must be a trade-off on quality. Information-processing theories suggest that there is a limit to the amount of information humans can absorb during a specific time period.

Jacoby (1974) report that when consumers have more information, satisfaction increases, but decision-making abilities decrease. (Buda & Zhang, 2000) also found that more information is not always better and that consumers prefer information that directly concerns their health. However, in the business-to-business environment there seems to be a belief that use of general environmental label together with more specific information is better than simply having specific information (Grankvist &

Biel, 2006). This may indicate that consumers prefer more information to less. Abbott (1997) found somewhat conflicting information in the UK. Although more than half of consumers wanted more detailed information, a large number wanted labels that used simpler words. Golan (2000); Drichoutis (2006) suggest that consumers might be unwilling to evaluate more complicated information.

Nature of consumption and environmental message on product judgment Heimbach & Stokes (1982) report that consumers find label information relating to known public health problems was the most useful. Grankvist (2004) discovered that consumers' knowledge of a product's risk factors lowered the actual consumption of these products. Grankvist & Biel (2006) also found that of the three environmental factors (pesticides, greenhouse gases, and energy usage) pesticides had the greatest influence on product purchase. They conjecture that this response may be due to the perception ingredients such as pesticides have a negative impact on both the environment and on the consumer's health. Witte's (1992) extended parallel process model examines how consumers may react to fear appeals and threats. With respect to products, consumers may be more motivated to avoid those products in which they perceive a threat and feel they can do something to avert that threat.

2.4 Conceptual framework

A conceptual framework is a hypothesized model that graphically portrays the relationships (Mugenda & Mugenda, 2003)

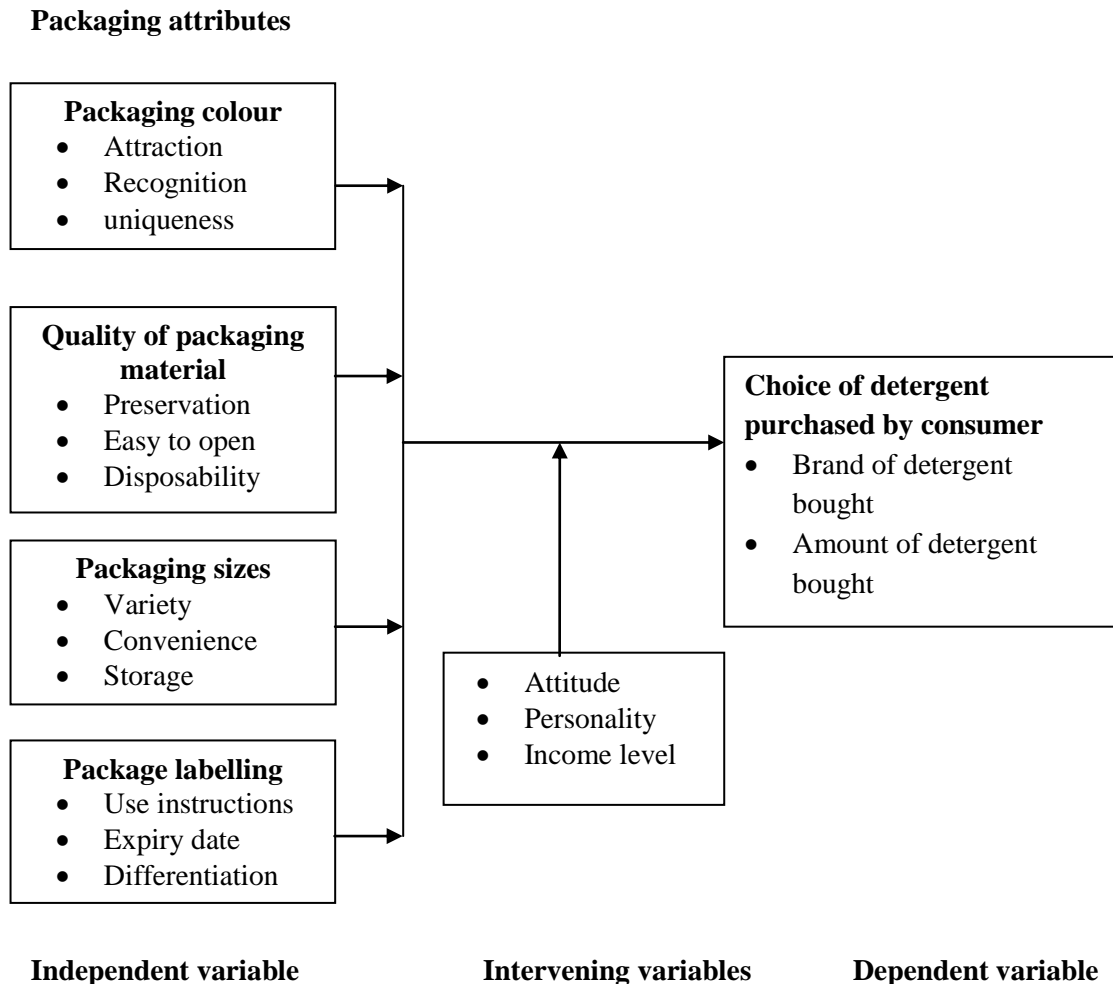


Figure 2.1: Conceptual framework

The conceptual framework tested whether there was any relationship between packaging colour and the choice of the detergent purchased by the consumer. Again, the conceptual framework intended to assess influence of material of the package on consumer detergent choice. Moreover, the conceptual framework sought to establish the relationship between packaging size and detergent choice and lastly, conceptual framework intended to determine the relationship package label and choice of detergent choice by the consumer. The conceptual framework measured the colour of the package in terms of how attractive the pack is, how it can easily be recognized and how unique its in the eyes of the consumer. Material of the package was be in terms of level of Preservation to the detergent ,how Easy it was to open and ease of

disposability. The size of the package was measured in terms of the range/Variety, Convenience of use and easy of Storage. The conceptual framework measured Package label by information given on Use instructions, Expiry date and ease of differentiation. The study's moderating variable included the consumers attitude, personality and income level of the consumer.

2.5 Research Gaps

On the basis of empirical studies reviewed above, it was evident there existed research gap that warrants address. That it could be argued that the package attributes influencing consumers detergent choice varies from consumer to consumer. Different colours had different meaning to different consumers probably due to differences in cultural background and difference in perception of the consumers (Madden ,2000). Again, different consumers had different feeling about the material of the package of the product, some look for environmentary friendly packages while others seek material to protect the product (Smith, 2004).

Different consumers prefer different sizes of the product, large size products are considered of high value, however some consumers prefer small sized products probably due to income available Broniarczyk (1998). Because of such differences, caution must be exercised in generalizing findings from one market to another or from one individual to another or from one product to another. That was the findings of studies reported on the contribution of packaging on consumer choice vary from one study to another, perhaps because of the different product in question, differing cultural background, and different perception. Therefore the study attempts to fill the gap created by previous studies in the search influence attributes of the packaging has on detergent choice.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, presents a comprehensive depiction of how the essential data was sourced, processed, analyzed and interpreted to fulfill the research objectives. The methodology elements considered in this chapter includes: the research design that was applied, the actual area of study, target population, the sample size and sampling procedure used, data collection instruments, validity and reliability of the instruments, data collection methods, the data processing and analysis techniques and the Ethical considerations.

3.2 Research Design

This study employed a descriptive survey design which involves quantitative approach. The study considered a descriptive survey design ideal and consistent with Sekaran (2006) argument that it is an efficient way in studies where the phenomenon to be investigated are known to exist and one wants to describe them better by offering a profile of the factors.

3.3 Target Population

The study was conducted in supermarkets in Nakuru CBD, In Nakuru Town; there are 10 supermarkets which formed the population of the study. The study used a sample drawn from the shoppers who were visiting the supermarkets on that day of data collection.

3.4 Sample Size and Sampling Procedure

Babbie and Maxfield (1995) define sampling as a method of selecting some part of a group to represent the entire population. Therefore this section discusses how the sample size was arrived at and the sampling procedures which was employed.

The study used multistage sampling, whereby the supermarkets were categorized in stratas since they have homogenous characteristics. Stratified random sampling was used to determine proportional sample from each strata.

Convenience sampling was used to determine the final respondents who were shoppers of detergents in the supermarket. To arrive at the sample size the Israel (1992) formula was used.

$$n = N / [1 + N (e)^2]$$

Where n is the sample size, N is the population size, and e is the level of precision (0.05). The study's target population was 500 shoppers. The target population determined by how many shoppers visited the supermarket during the time of data collection as shown by table 1.1 below.

$$n = N / [1 + N (e)^2]$$

$$n = 500 / [1 + 500 (.05)^2]$$

$$n = 500 / [1 + 500 (.025)^2]$$

$$n=222$$

n=222 was the study sample size which was differently distributed in the supermarkets. To determine the study sample as follows;

Table 3.1 Sample Size and Sampling Procedure

Supermarkets	detergent shoppers (sample stratas)	Stratified proportional sample size
Tuskys	56	25
Ukwala	45	20
Gilanis	77	34
Woolmatt	47	21
Stagematt	39	17
Nakumatt	50	22
Quickmart	48	21
Vision matt	40	18
Rihabmatt	39	18
Naivas	59	26
Total	500	222

Source: Supermarkets registered with county offices.

The sample size was two hundred and twenty two.

3.5. Research Instrument

The study used questionnaires as the main data collection instrument. The study Questionnaires were administered to the 222 sampled shoppers. The questionnaire was constructed using close ended Likert type statements (items). Measurement of the constructs was be done via a 1 (strongly disagree) to 5 (strongly agree) scale based on

the extent to which the respondents agreed with the statements. The questionnaires had six sections. Section A aimed to collect the profile of the respondents. Section B solicited information on the study's first objective about how packaging colour influence consumers choice of detergent. Section C sought for information on the study's second objective which was on how packaging material influence consumers choice of detergent. Section D sought to get information on the study third objective which was on determining the influence of packaging size on consumer choice of detergent. Section E solicited information on the study's fourth objective about how packaging label influence consumers choice of detergent. Section F solicited information on the consumer purchase behaviour which is the study's dependent variable and to what extent it was influenced by the study's independent variables.

3.5.2. Validity of Instruments

According to Sekaran (2006), validity is authenticity of the cause and effect relationship and their generalizability. Dooley (1996) defines validity as the extent to which the study instruments capture what they purport to measure. The validity of the instruments was ascertained by conducting a pilot study. This ascertained that the instructions were clear and all possible responses to the questions was assisted capturing the required data. Content validity of a measuring instrument is the extent to which it provides adequate coverage of the investigative questions guiding the study (Mugenda, 2003).

3.5.3 Reliability of Instruments

According to Sekaran (2006), reliability of a measure indicates the extent to which it is without bias and hence ensures consistent measurement across time and across the various items in the instrument. This means that reliability refers to how consistent a research procedure or instrument is or a measure of degree to which research instruments yields consistent results or data after repeated trials. The Cronbach alpha method was be used to estimate the reliability coefficient of the data collection tool. The tool is expected to yield a reliability coefficient between 0.6-0.7, which is the threshold recommended by Frankel and Wallen (2000).The reliability test results was 0.76 which indicated that the instruments could be relied on in measuring answering the research questions

3.6 Data Collection Procedure

The researcher obtained transmittal letter from the University. Once the permit was granted the researcher formally contacted the respondents through the supermarket where they did their shopping. The researcher explained to the respondents the purpose of the study and sought their consent to participate in the research. The respondents were briefed on how to fill the questionnaires before they are administered after picking the items from the shelves. The researcher stood besides the detergent shelves to an able her give the questionnaires to shoppers after they have made a choice of the detergent. Each respondent was a questionnaire which he/she filled on the spot.

3.7 Data Analysis and Presentation

According to Bryman and Cramer (2008), data analysis seeks to fulfill research objectives and accept or reject the study hypothesis. In the study, data analysis entailed field editing before bringing the instruments together in order to reduce on errors and ensure that all instruments have complete information as desired. This was followed by categorization and coding. The next step was to enter it into a preset screen, cleaning, transformation and analysis. The statistical package for social sciences (SPSS). Only valid included in the analysis as missing data was handled using List wise deletion, which is SPSS default standard. Quatitative data was analyzed and presented using frequencies and percentages. Inferential statistics: Multiple regression was used to establish influence of explanatory variables on variation of dependent variable. Spearman Correlation was used to test the nature of relationship between study variables which was at the same time used to used to test research hypotheses at 0.05 significance.

The study will employ the following regression model

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon_i$$

Y=choice of detergent by consumer

a = Intercept term

β_1, β_2 and β_3 = Coefficients

X_1 =package colour

X_2 =package size

X_3 =package Quality of material

X_4 =package label

ε_i = Error term assumed to be normally distributed

3.8. Ethical Considerations

The researcher adhered to the laid down ethical practices and ensured that they were observed at all the time. This included seeking for consent from all the respondents before data collection, assurance of confidentiality of information obtained from the respondents as well as providing appropriate information regarding the importance and significance of the study.

CHAPTER FOUR

DATA ANALYSIS INTERPRETATION AND DISCUSSIONS

4.1 Introduction

The following chapter gives results of the research and discussion of the results.

Response rate: The study targeted 222 respondents and all 222 questionnaires were returned. Therefore the data analysis was based on 222 respondents.

Table 4. 1: Response rate

Response rate	Frequency	Percent
Returned	222	100
Un returned	0	0
Total	222	100

4.2 General characteristics of detergent shoppers

Female (70%) dominated. It is apparent that compared to males, women were more involved in shopping of detergents from the supermarkets. (Table 4.2)

Table 4.2: Gender of respondents

Gender	Frequency	Percent
Male	66	29.1
Female	156	70.9
Chi square	2.277	
p-value	0.517	
Total	222	100.0

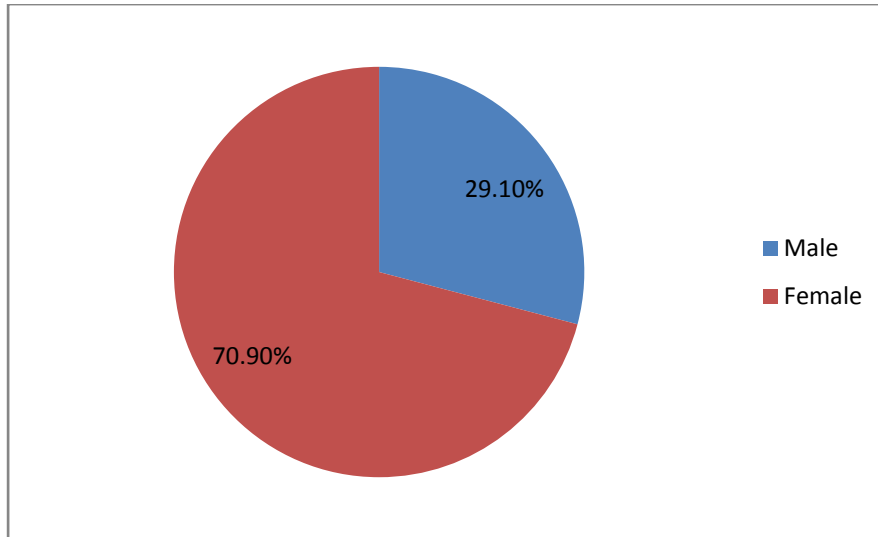


Figure 4.2: Gender of respondent

Figure 2 present gender of respondent. Female dominated with (70.9%) while males had (29.1%)

Table 4.3: Age of respondents

	Frequency	Percent
Below 25 years	44	13.2
26-35 years	80	44.2
36-45 years	68	39.3
above45 years	30	3.3
Chi square	2.277	
p-value	0.517	
Total	222	100.0

The respondents aged 26-35 years were the majority (44.2%) of the detergent shoppers followed by those aged 36-45 (39.3%), followed by below 25 years (13.3%) then above 45 years (3.3%) (Table 4.3).

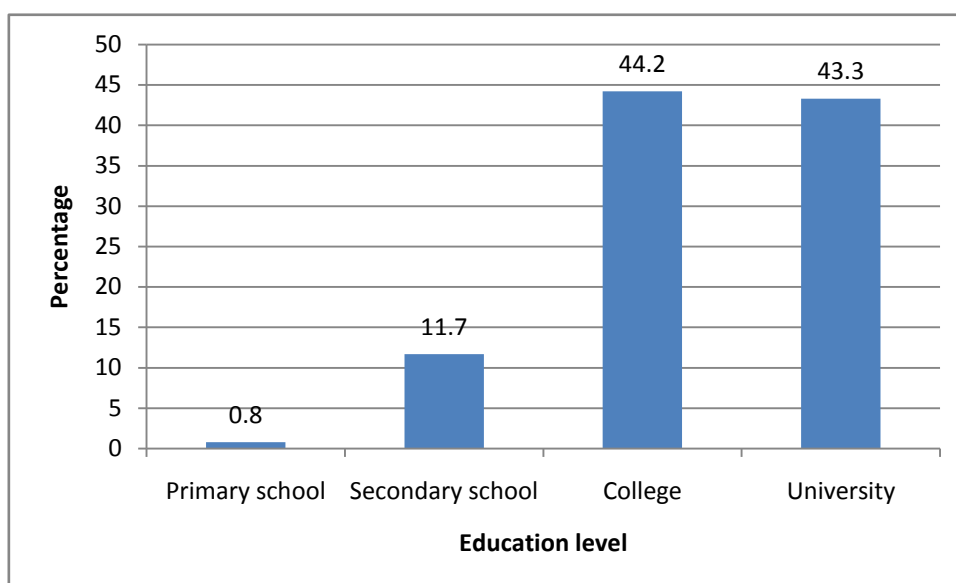


Figure 4.3: Education level of respondents

It was, therefore, apparent that the supermarket shoppers were relatively young.

Figure 3 presents academic qualification of the shoppers. The results indicated college level as a level where many shoppers has reached (44.2%), followed by University level (43.3%) followed by secondary school level (11.2%) then primary school level (8%). This meant that most of consumers may have known what kind of information they sought from the packaging, such that they could read and understand the labels on the detergent packaging.

Table 4.4: Number of shopping years.

No. of years	Frequency	Valid Percent
Less than 1 year	5	5.7
1-2 years	17	15.5
3-5 years	60	79.0
Over 5 years	5	5.7
Chi square	10.763	
p-value	0.549	
Total	222	100.0

The table 4.3 shows the results of the number of years the respondent had shopped in the supermarket. The results show that 79% of the respondents had shopped in that supermarket in period between 3-5 years. 25.5% the respondents had shopped for a period of 1-2 years. Those who had shopped for less than 1 year scored 5.7%, while

those who had shopped for over 5 years scored 5.7%. This implies that the consumers have become loyal to the supermarkets they usually shop at. This may have resulted from a steady supply of the detergents of their choice in the supermarket.

4.3 Influence of packaging color on detergent consumer choice

The study's objective one was to determine the influence of package colour on detergent consumer choice.

Table 4.5: Frequencies of packaging colour

	The Colour of the package catches my attention.	The colour of package help to distinguish	Colour and performance	bright coloured packaging readily attract my attention.	Dark colour do not attract my attention.
Strongly disagree	5(4.2%)	12(10.3%)	9(7.7%)	10(8.5%)	9(7.7%)
Disagree	4(3.4%)	20(17.1%)	10(8.5%)	12(10.3%)	9(7.7%)
Moderately agree	15(12.7%)	17(14.5%)	24(20.5%)	26(22.2%)	28(23.9%)
Agree	46(39%)	35(29.9%)	43(36.8%)	43(36.8%)	54(46.2%)
Strongly agree	48(40.7%)	33(28.2%)	31(26.5%)	26(22.2%)	17(14.5%)
Chi square	5.340	14.409	6.294	12.760	13.213
p-value	0.946	0.275	0.645	0.387	0.232

The results in table 4.4 show respondents' response in colour of the package. They show the percentage of influence of colour of package. The proportion of respondents who accepted that colour of the package is the first that they look at was relatively high: respectively, 79.7% of the respondents agreed and 12.7% moderately agreed that they consider the colour of the package while purchasing detergents. Only 7.6% reported disagree ($\chi^2=5.340, p\text{-value}=0.946$). This means that consumers, while doing their shopping for detergent, the first thing that they look at is colour of the package or else what readily caught their attention was the colour of the detergent package (Table 4.4). This agrees with Nilsson & Ostrom, 2005, who in his research found that an attention capturing color helps to consumer to visually see and differentiate the competitive brand.

Correspondingly, 86.3% of the respondents reported agree and 14.5% moderately agreed while 27.4 disagreed that there colour of the package help them distinguish one detergent from another (Table 4.4) .This means that when the package of the detergent has a certain colour,it makes it easy for the consumers to distinguish it from others. This supports the studies by Nilsson &Ostrom, 2005, attention capturing color helps to consumer to visually see and differentiate the competitive brand. Majority of the respondents also reported associating the colour of the detergent package with its performance. This was confirmed by 63.3% of the respondents who agreed, compared to 16.2% of the respondents who disagreed. 20.5% moderately agreed. ($\chi^2=14.409$ $p=0.035$).This means that the colour of the package may be directly associated with the ingredients which may give a clue on the performance is likely to be. This agrees with such findings as Color of packaging has different meaning such as a green color show the natural, secure relaxed or easy going. Red colors indicate the human excitement, hot, passionate and strong. Orange colors represent the power, affordable and informal. Brown colors show the informal and relaxed masculine nature whereas white color indicates goodness, purity, cleanliness, refinement and formality. Black color power authority and mystery. Consumer often perceived the quality by using or relating the color (Leichtling, 2002).

The response on the detergents with bright coloured packaging readily attracting attention was also positive. 60% of the respondents agreed or agreed compared with 18.8 % who disagreed and 10.3% of the 22.2% moderately agreed.(Table 4.4).This implies that the consumers are readily attracted by bright colours of the packaging of the detergent. ($\chi^2=6.294$ $p=0.05$).

Majority of the respondents agreed 60.7%, 15.4% moderately disagreed and 23.9% with 7.7% strongly disagreed that detergents with dark coloured packaging do not attract attention($\chi^2=12.760$ $p=0.05$). This means that the some consumer prefer dark coloured packages who in this case were men. This therefore means that men are attracted by dark colours. Packaging colour In support of this research findings, Silayoi & Speece (2004)in their study concluded that visual elements of the package influence choice of the product to a great extent, and graphics and colours are frequently the major influence. They further opined that packaging helps contribute to a positive shopping experience – when shopping in the supermarket, a colourful pack catches their attention. Also, some customers usually go for colourful package when they are

looking for kid's products. Package when assist customers to find products easier. Attractive packaging generates consumer attention by breaking through the competitive clutter and picture vividness has the most positive impact for products with lower level of involvement. According to Shah, Ahmad, & Ahmad (2013) colour of packaging is important and apart one company product from another. Packaging colour draw attention of the consumers the more the colour is attractive the more consumer will like it.

4.4 Influence of packaging material on detergent consumer choice

The study's objective two was to determine influence of package material on detergent consumer choice

Table 4.6: Frequencies of packaging quality of material

	When purchasing a detergent, I look for a package with a container I can use for another purpose or easily refill	When purchasing a detergent I go a package that I can dispose off easily after use.	When purchasing a detergent I go for a package am able to open and close easily.	When purchasing a detergent I go for a package which is able to keep my detergent fresh for every use	When purchasing a detergent I go for a package which is able to show the level of the content inside.
Strongly disagree	5(4.3%)	7(6%)	12(10.3%)	5(4.4%)	16(13.8%)
Disagree	5(4.3%)	7(6.6%)	16(13.8%)	6(5.3%)	10(8.6%)
Moderately agree	17(14.5%)	13(11.1%)	19(16.4%)	18(15.8%)	25(21.6%)
Agree	37(31.6%)	44(37.6%)	37(31.9%)	46(40.4%)	31(26.7%)
Strongly Agree	53(45.3%)	46(39.3%)	32(27.6%)	39(34.2%)	34(29.3%)
Chi square	11.497	8.781	8.960	14.630	3.116
p- value	0.487	0.722	0.706	0.362	0.960

The results in table 4.5 show respondents response on packaging material. Majority of the respondents agreed that when purchasing a detergent they look for a package with a container that can be used for another purpose or easily refill with 76.3%.14.5%

moderately agreed while 8.6% disagreed ($\chi^2=11.497$, $p=0.05$). This may have been attributed by the fact that many consumers like buying canned detergent of which this container can be refilled by purchasing a sachet detergent which is cheaper and economical to the consumer.

The results show that 76.9% agreed, followed by moderately agree 11.1%, disagree 12% on that when purchasing a detergent consumers go for a package that can be easily disposed off after use. ($\chi^2=8.781$, $p=0.01$). This shows that consumers prefer environmentally friendly packaging material which is easy to dispose with less pollution to the environment. The results agree with the research that, green purchasing is essentially the act of buying environmental friendly products through the use of the product including its disposal. Consumers like the material of package which is environment friendly (Smith, 1993; Shimp 2000)

The results show that most of respondents agreed 59.5% while 16.4%, moderately agreed and disagree 24.1% that when purchasing a detergent the consumer go for package that it is easy to open and close easily. The findings show that majority of respondents agreed 74.6% that when purchasing a detergent they go for a package which is able to keep detergent fresh for every use and 15.8% moderately agreed. Those who disagreed 9.7% ($\chi^2=14.63$, $p=0.25$). This means that the consumers look for a detergent which remains fresh and up to performance until it finishes.

Responding to the issue of purchasing a detergent with a package which is able to show the level of the content inside, most respondents agreed 56% while moderately agree scored 26.7% 22.4% reported disagree. ($\chi^2=3.116$, $p=0.960$). This means that the consumers prefer those detergents whose packaging material can show the content level inside, the colour of the content and also the form of the detergent. This may assist the consumers to identify the detergent by the colour of the content.

4.5 Influence of packaging size and detergent consumer choice

The results in table 4.6 show respondents response size of packaging, 51.7% agree that detergents in small sizes result to poor handling and use. Only, correspondingly to 29.9% disagreed and 18.4% moderately agreed. This implies that the consumers prefer large packaging which are easy to handle and convenience of use. ($\chi^2=24.105$, $p=0.004$).

Correspondingly, 50% of the respondents agreed and moderately agreed scored 24.2% while 25.9% disagreed that detergents in large sizes reduce inconveniences in use($\chi^2=14.872$, $p=0.025$). (Table 4.6). This shows consumers prefer detergents in large packages to reduce inconveniences of running out of stock before the next shopping session especially those who shop at stipulated period of time.

Majority of the respondents also agreed to the fact that Detergents in small sizes are of no economic value. This was confirmed by 57.2% of the respondents who reported agree($\chi^2=17.172$, $p=0.001$).. This means consumers prefers large packaging, since the small sizes end up being expensive in terms of retail price which may be due to lack economies of scale in the part of the manufacturer. The findings agree with previous research which suggested that large pack of product provide better value as compare to small pack (Vila, 2006).

Table 4.7: Frequencies of packaging size

	I prefer detergents in large pack to enable to use it for long period of time	I prefer detergents packed in small sachets for short term use and necessitate a rebuy	Products in larger sizes seems to be of high quality	Detergents in small sizes results to poor handling and use.	Detergents in small sizes are of no economic value	Products in large sizes reduce inconveniencies in use.
Strongly disagree	19(16.7%)	14(11.7%)	25(21%)	16(13.3%)	19(16%)	32(26.7%)
Disagree	15(13.2%)	17(14.2%)	13(10.9%)	14(11.7%)	19(16%)	28(23.5%)
Moderately agree	21(18.2%)	29(24.2%)	13(10.9%)	19(15.8%)	14(11.8%)	15(12.5%)
Agree	34(29.8%)	27(22.5%)	36(30.3%)	43(35.8%)	39(32.8%)	23(19.2%)
Strongly Agree	25(21.9%)	33(27.5%)	32(26.9%)	8(23.3%)	28(23.5%)	22(18.3%)
Chi square	24.105	14.872	17.172	9.549	7.114	9.896
P value	0.004	0.249	0.143	0.655	0.850	0.625

The results shows that 59.1% of the respondents agree while 15.8% moderately agree compared with 25% of the respondents who disagreed that they prefer detergents in large pack to enable to use it for long period of time($\chi^2=17.172,p=0.001$).. This may be attributed to the perception that detergents in large packaging may lose power of performance over time

Majority of the respondents agreed 56.3%.11.6% moderately agreed while 32.0% disagreed that they prefer detergents packed in small sachets for short term use and necessitate a rebuy (table 4.6) ($\chi^2=9.549,p=0.05$)..This shows that consumers prefer detergents in small quantities to enable them buy more often. The results agrees with previous research suggested that large pack of product provide better value as compare to small pack (Vila, 2006).

Responding on whether detergents in small sizes are of no economic value 38% disagreed,14% moderately agreed while 67% strongly agreed. ($\chi^2=7.114,p=0.850$).

4.6 Influence of packaging label on detergent consumer choice

The results in table 4.7 show respondents response on packaging label 64.1% of respondents agreed,9.4% moderately agreed while disagree scored 26.5% respectively that they prefer a product with clear legible labels and writing($\chi^2=14.092,,p=0.02$). (table 4.7). The results with labeling influences the consumer buying behavior, but there are some other factors also, which influence the consumer buying behavior (Saeed,et al, 2013).

Table 4.8: Frequencies of package label

	I prefer a product with clear legible labels and writing	From a label I easily distinguish one brand from another	I prefer a product with information on: usage and application, ingredients, expiry dates, weights on the label.	I prefer a product with a label I can easily read and understand	I prefer a product with a label showing how to easily dispose after use
Strongly disagree	18(15.4%)	7(6%)	21(18.3%)	8(6.9%)	11(9.4%)
Disagree	13(11.1%)	3(2.6%)	21(18.3%)	10(8.6%)	23(19.7%)
Moderately agree	11((9.4%)	6(5.1%)	18(15.7%)	17(14.7%)	24(20.5%)
Agree	33(28.2%)	39(33.3%)	26(22.6%)	43(37.1%)	32(27.4%)
Strongly Agree	42(35.9%)	62(53%)	29(25.2%)	38(32.8%)	27(23.1%)
Chi square	14.092	19.728	17.018	10.731	16.895
p-value	0.519	0.072	0.149	0.552	0.154

While 8.6% reported disagree. (Table 4.7). Consumers prefer a product with clear legible labels and writing 47.8% responded agree, followed by moderately agree at 15.7%. 36.6% of respondents who disagreed ($\chi^2=14.092$, p-value=0.519). This can be attributed to the consumers looking for clarity on the information provided on the package. In response to whether the label easily help the consumer distinguish one brand from another, 8% disagree, 5% moderately agree while 86% agree. ($\chi^2=19.728$, p-value=0.01)

In respect to the question on consumers preferring a product with information on: usage and application, ingredients, expiry dates, weights on the label, majority of reported agree at 69.9%. Moderately agree scored 14.7% while disagree scored 13.5% ($\chi^2=17.018$, p-value=0.05). (table 4.7). The results agree with the studies which shown that there is a significant relationship between consumer purchase decision and information on packaging (Parisa, 2013).

The results show that 50.5% of the respondents agreed, moderately agree scored 20.5%. while disagree scored 29.1 % that consumers prefer a product with a label

showing how to easily dispose after use ($\chi^2=10.731$, p-value=0.05). (table 4.7). Packaging with a label showing how to dispose were preferred so as create a safe environment even after usage of a detergent.

4.7 Spearman's rho Correlations

Table 4.9: Spearman's rho Correlations

	Colour of the package	Material of the package	Size of the package	Label of the package	Consumer choice.
Colour of the package	.				
	222				
Material of the package	.381**	.			
	.000	.			
	222	222			
Size of the package	.313**	.237**	.		
	.000	.009	.		
	222	222	222		
Label of the package	.242**	.186*	.173	.	
	.008	.042	.059	.	
	222	222	222	222	
Consumer choice	.261**	.230*	.224*	.277**	.
	.004	.011	.014	.002	.
	222	222	222	222	222

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

The results in table 4.8 above show the results of Correlation analysis which was performed to test the correlation between attributes of packaging and consumer choice of detergent. The results in the table above also showed the Inter-correlations between the attributes of packaging.

4.8 Correlation between colour of the package and consumer choice.

Spearman's rho correlation results shown that the correlation between colour of the package and consumer choice was significant and positive ($r=0.261$, $p=0.004$). This point to the fact that as colour of the package goes up consumer choice also rises. The table 4.8 above also shows the correlation between packaging colour and other independent variable such that packaging colour and packaging material showed a significant relationship at ($r=0.381$, $p=0.000$) This means that the significant relationship which contributes to the significant relationship seen on the dependent variable. Packaging colour also showed a significant relationship with other independent variables.

4.9 Correlation between package material and consumer choice

The results of correlation between **package material and consumer choice** was significant and positive ($r=0.230$, $p=0.011$). This points to the fact that as package material goes up consumer choice also rises. The table 4.8 above showed the relationship between packaging material with other independent variables. Packaging material showed a significant relationship with other independent variables.

4.10 Correlation between size of the package and consumer choice.

The results of correlation between size of the package and consumer choice was positive and significant ($r=0.224$, $p=0.014$). This points to the fact that as size of package goes up consumer choice also raises. The correlation showed the relationship between packaging size and consumer choice, the independent variables of the study. Packaging size showed a significant relationship with other independent variables.

4.11 Correlation between packaging label and consumer choice

The results of correlation between **package label and consumer choice** was significant and positive ($r=0.277$, $p=0.002$). The results of inter-correlations between independent variables shown that package colour has positive and significant correlation with the other independent variables.

4.12 The Influence of package colour, package material, package size and package label on consumer choice.

Regression analysis was conducted between independent variables and dependent variable. Regression analysis (multiple regression) assisted in determining the effect of package colour, package material, package size and package label on consumer choice". The results in table 4.8 show R square which shows the percentage contribution of the independent variables into the variation of the dependent variable. In this case the contribution is 32% by the explanatory variables.

Table 4.10: Regression Model Summary for significance test.

Model Summary

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1	.586 ^a	.343	.320	.76965

a. Predictors: (Constant), Mean package colour, mean package material, mean package size, mean package label.

From the results above the adjusted $R^2=32.0\%$, meaning, 32.0%, variation in dependent variable is explained by explanatory variable. Our independent variables are contributing only 32% of the variability in the dependent variable. There is need for further research to identify other variables that affect consumer choice that would contribute to the 68% not accounted for by this study.

Table 4.11: Regression Anova

Anova^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	35.599	4	8.900	15.024	.000 ^a
	Residual	68.121	218	.592		
	Total	103.719	222			

a. Predictors: (Constant), Mean package colour, mean package material, mean package size, mean package label.

b. Dependent Variable: Mean consumer choice

From the results in table 4.10 above ,the F statistics of $F=15.024$ at $p=0.000$ shows that the model is significantly fit. More ever a mean square of residue is very low at 0.592 as compared to regression mean of 8.920 meaning the regression line fits actual data.

Table 4.12: Regression Coefficients**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.104	.612	.46	.170	.866
	Mean package colour	.530	.122	.402	4.362	.000
	Mean package material	.306	.166	.159	1.847	.067
	Mean package size	-.048	.110	-.037	-.436	.664
	Mean package label	.394	.141	.224	2.795	.006

a. Dependent Variable: Mean consumer choice

From the regression table above, beta coefficients shows that package colour contributes the highest to the model ($\beta=0.402$), followed by package label ($\beta=0.224$), package material at ($\beta=0.159$) and package size has a negative contribution ($\beta=-0.037$).

To find the influence of packaging attributes on consumer buying behavior, following equation was developed

$$\text{Consumer choice of detergent} = 0.104 + 0.530x_1 + 0.306x_2 - 0.048x_3 + 0.394x_4$$

The above regression equation shows that for every one increase of packaging colour, consumer choice of detergent increases with 0.530. When packaging material increases with one unit, consumer choice of detergent increases with 0.306. The equation shows that when packaging size variety increases with one unit, consumer choice of detergent decreases with 0.048. When, packaging label increase with one unit, detergent chosen increases with 0.394.

4.13 Hypothesis Testing

The results in the regression coefficient above in table 4.11 above were used to test the study hypothesis.

H₁₀: There is no significant relationship between Packaging colour and choice of detergent purchased by consumers in Nakuru County, Kenya.

From the table 4. 11 above shows a positive relationship between packaging colour and choice of detergents $\beta=.530$ and $p=0.000$. This shows a positive relationship which is significant at 0.05. This because the p-value is 0.000 which is below alpha 0 .05. Therefore the null hypothesis “There is no significant relationship between Packaging colour and choice of detergent purchased by consumers in Nakuru County, Kenya. ‘was rejected and alternative hypothesis was accepted. “There is significant relationship between Packaging colour and choice of detergent purchased by consumers in Nakuru County, Kenya.”

H₂₀: There is no significant relationship between Packaging material and choice of detergent purchased by consumers in Nakuru County, Kenya.

The results in the table 4.11 above, shows that there is a positive relationship between packaging material and choice of the detergent purchased by the consumers. This is given by the results that $\beta =0.306$ and $p=0.067$. The $P=0.067$ is greater than alpha 0.05; therefore it means that there does not exist a significant relationship. Hence the null hypothesis :”There is no significant relationship between Packaging material and choice of detergent purchased by consumers in Nakuru County, Kenya.” was accepted and alternative hypothesis rejected. This research work is tandem with the study of Shad, Ahmad & Ahmad (2013) which concluded that packaging material have significant relation with consumer choice. According to them packaging material is important element which prevents the product from loss. High material attracts customer than low. Study conducted by (Sial, et al .2011) concluded that packaging has a positive relationship with the buying behaviour of young customers.

H₃₀: There is no significant relationship between Packaging size variety and choice of detergent purchased by consumers in Nakuru County, Kenya.

The results in the table 4.11 above, shows that there is a negative relationship between packaging size variety and choice of the detergent purchased by the consumers. This

is given by the results that $\beta = -0.048$ and $p = 0.664$. The $P = 0.664$ is greater than alpha 0.05, therefore it means that there does not exist a significant relationship. Hence the null hypothesis: "There is no significant relationship between Packaging size variety and choice of detergent purchased by consumers in Nakuru County, Kenya." was accepted and alternative hypothesis was

H_{40} : There is no significant relationship between Packaging label and choice of detergent purchased by consumers in Nakuru County, Kenya.

The results in the table 4.11 above, shows that there is a positive relationship between packaging material and choice of the detergent purchased by the consumers. This is given by the results that $\beta = 0.394$ and $p = 0.006$. The $P = 0.006$ is less than alpha 0.05, therefore it means that there does exist a significant relationship. Hence the null hypothesis: "There is no significant relationship between Packaging label and choice of detergent purchased by consumers in Nakuru County, Kenya." is accepted and alternative hypothesis was rejected.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 Summary

The main objective of this study was to determine the influence packaging attributes on consumer choice. The four attribute of packaging shown different influence on consumer choice. Colour of the package had a significant influence consumer choice which had a p- value of 0.000 which is less than (α 0.05).packaging material had no significant influence on consumer choice $p=0.067$ which is greater than (α 0.05).size variety of the packaging had no significant influence on detergent consumer choice $p=0.664$ which is greater than (α 0.05).packaging label had significant influence on consumer choice ($p=0.006$) which is less than (α 0.05).

5.2 Conclusions

Colour of the package contributed positively to the consumer choice. colour of the package and consumer choice showed a positive and significance correlation. Attraction, Recognition and uniqueness all show the different attributes of colour of the package which influence consumer choice of a particular detergent.

Material of the package had no significance influence on consumer choice. However correlation analysis showed a positive relationship between material of the package and consumer choice do exist. Different attributes of a package included preservation, easy to open and disposability. When a detergent package material preserves its content well, the more the preference, since consumers would want the detergent remain fresh and powerful in performance during use. The detergent package should be easy to open and close after use for proper handling. The material of the package should be able to be disposed off safely, without pollution to the environment.

Size of the packaging had no significance influence on consumer choice. However Correlation analysis showed positive relationship do exist between size variety of packaging and consumer choice of detergent. The attributes of size variety; Convenience and Storage .package of different detergents should be of different varieties and convenience in handling.

Packaging label had significant influence on consumer choice Correlation analyses also showed a positive relationship do exist between packaging label and consumer

choice. The research indicated that consumers preferred detergents with clear legible labels and writing so they can get information that they need about the product. The study shown that packaging helps them distinguish one brand from another. From the label, consumers look for information on: usage and application, ingredients, expiry dates, weights on the label. From the study, it was shown that consumers prefer labels with information of how to safely dispose the package after use.

When the four variables are correlated each with consumer choice they all shown a positive and a significant correlation but when they are combined and a multiple regression was carried on them, it showed that colour of the package and labels on the package have an influence on consumer choice while material of the package and packaging size have no effect. Therefore it can be concluded that the influences of material of the package and packaging size as attributes of detergent packaging cannot be traced on consumer choice.

5.3 Recommendations

From the study, recommendations are as below:

Manufacturers should ensure that the colour of the package should be designed in a way that will attract attention of the consumer. The colour should also be unique to enable consumers distinguish it from competitors product. Packaging colour should be able to give the consumer a clue of the possible ingredients, for example, purple colour may signify presence of lavender as an ingredient, yellow may signify presence of lemon.

When designing a package material, manufacturers should consider that material that is going to preserve the detergent. One which will keep the detergent fresh, powerful on performance in every use. The material which will not be easily destroyed by water. The material should be transparent enough to show the level of content inside. The material should be designed to allow ease of opening and closing after and in every use.

Manufacturers should also design a convenient packaging size in handling and for storage. The label of the package should provide all information which may be needed by the consumer such as: expiry dates, ingredients, customer care hotline, brand name clearly shown, application and uses.

5.4 Suggestions for Further Research

The objective of the study was to determine the effects of packaging attributes on consumer choice. The research indicated that colour of the package and labels on the package has significant effect on consumer choice, while material of the package and size of the package have no significant effect on consumer choice of detergent. Attributes of packaging contributes only 32% of the consumer choice of the detergent. There is need for further research to identify other variables that affect consumer choice that would contribute to the 66% not accounted for by this study.

REFERENCES

- Ampuero, O., & Vila, N. (2006). Consumer perceptions of product packaging. *Journal of Consumer Marketing*, 23(2).
- Babbie, Earl.(1992) *.The Practice of Social Research* (6th ed.) Belmont, CA: Wadsworth,.
- Babin B.J, Boles J.S, Darden W.R(2003) *.Salesperson stereotypes, consumer emotions, and their impact on information processing.* J Acad Mark Sci 1995;23:94 – 105 (Spring).
- Baron J. Cognitive biases, cognitive limits and risk communication. *Journal of Public Policy & Marketing* 2004; 23(1): 7
- Beach, L. R., Puto, C. P., Heckler, S. E., Naylor, G., & Marble, T. A. (1996). Differential versus unit weighting of violations, framing, and the role of probability in image theory's compatibility test. *Organizational Behavior and Human Decision Processes*, 65, 77–82.
- Belch, George E. & Michael E. (1999). *Advertising and Promotion: An Integrated Marketing Communication Perspective* (4th ed). Mc Graw Hill.
- Blackwell, R., Miniard. K, (2001). Consumer Behavior.* 9th ed. Orlando: Harcourt.
- Bozinoff, L., 1982. *A script theoretic approach to information processing: an energy conservation application.* . In: *Advances in Consumer Research IX.* Twelfth Annual Conference ed. Missouri: Association for Consumer Research.
- Brewer J. (2004). *Advances in color matching.* Dent Clin North Am 48:341-58
- Broniarczyk, Susan M., Wayne D. Hoyer & Leigh M, (1998), "Consumers' Perceptions of the Assortment Offered in a Grocery Category: The Impact of Item Reduction," *Journal of Marketing Research*, 35 (May), 166-176
- Burke, S. J., Milberg, S. J., and Moe, W. W. (1997). Displaying common but previously neglected health claims on product labels: Understanding competitive advantages, deception, and education. *Journal of Public Policy & Marketing*, 16(2), 242-255.
- Butkeviciene, V., J. Stravinskiene and A. Rutelione (2008). 'Impact of consumer package communication on *Journal of Marketing and Consumer Research* www.iiste.org ISSN 2422 8451 An International Peer-reviewed Journal Vol.10, 2015
- Butkeviciene, V., J. Stravinskiene and A. Rutelione (2008). *'Impact of consumer package communication on consumer decision making process'*, Inzinerine Ekonomika-Engineering
- Cole, C. A., Balasubramanian, S. K., and Castellano, N. M. (1992). *Individual differences in consumers' willingness to use nutritional information.* InJ. F.

- Sherry, Jr. and B. Sternthal (Eds.), in *Advances in Consumer Research* (Vol. 19, pp. 489-490). Provo, UT , USA: Association for Consumer Research
- Coulson, N. S. (2000). An application of the stages of change model to consumer use of food labels. *British Food Journal*, 102(9), 661-668.
- Cutler, Armstrong. (1999), "*Principles of Marketing*, Bahaman Forouzandeh, Amooze publishing, second edition.
- Cutler & Armstrong, (2007), *Principles of Marketing*, Bahman Forouzandeh, Isfahan, Atropat, sixth edition, p 363.
- Cutler& Philip. (2003), *Principles of Marketing*, translated by Bahman Forouzandeh, Atropat publishing, fourth edition, p 363
- Cutler & Philip. (2010), *Marketing Management*, Bahman Forouzandeh, Isfahan, Amokhte, fifth edition, p 498.
- Cutler & Philip; translated Forouzandeh, Bahman. (2002), *Marketing Management, Analysis, Planning, Execution, Control*, page 500. *Economics*(1), pp. 57-65.
- Cziko, G.,(2000). *The Things We Do: Using the Lessons of Bernard and Darwin to Understand the What, How, and Why of Our Behavior* Massachusetts: MIT Press Descartes, (1640). *Meditationes de Prima Philosophia*.
- Drichoutis, A. C., and Lazaridis, P. (2006). *What influences tastes? An analysis of the determinants of consumers 'demand for tastes in food*: Agricultural University of Athens.
- Eysenck, M., Keane.M.I, (2000). *Cognitive psychology: a student's handbook*. 4th Ed. ed. London: Lawrence Erlbaum
- Foxall, G., (1990). *Consumer Psychology in Behavioural Perspective*. London: Routledge.
- Furedy, J. J (1987). *Human Pavlovian autonomic conditioning and the cognitive paradigm*. In: G. DAVEY, ed. *Cognitive Processes and Pavlovian Conditioning in Humans*. Chichester: John Wiley & Sons Ltd,
- Gallen, C. & Sirieix, L. (2007). Ledesign est-il comestible?Kluwer Academic Publishers. Printed in the Netherlands. *Journal of consumer marketing*, 23/2, 2006,pp. 100-112. (Kotler et al. 1998) principal of marketing (According the (Kotler et al. 1998) in the past primary objective of packaging was to prevent the products but this concept was now change.
- Goethe, J.W (1982). *Theory of colours*. Cambridge, Massachusetts: the M.T.T Press
- Grossman, R. P. & Wisenblit J. Z. (1999). What we know about consumers' color choices. *Journal of Marketing Practice* , 5 (3), pp. 78-90.

- Golnesa, H. R. (2013). "An Investigation of Visual Components of Packaging on Food Consumer Behavior". *Business and Economics Research*, 3 (2), 1-11. [Grossman, R. P., & Wisenblit, J. Z. (1999). what we know about consumers' color choices. *journal of marketing Practice: applied marketing science*, 5 (3), 78-88.
- Esgate. A & Groome .D.(2005).*Applied Cognitive. Psychology*. Psychology Press27 Church Road, Hove, East Sussex, BN3 2FA
- HallWang, R, W.Y., and Chen, W.C.(2007).*The study on packaging illustration affect on buying emotion, International association of societies of design research*, The Hong Kong Polytechnic University.
- Hawkins, D. I., Best, R. J., & Coney, K. A. (2004). Consumer Behavior - Building Marketing Strategy*. New York: McGraw-Hill.
- Herpen.V ,Erica, & Pieters, V ,(2002), "*The Variety of an Assortment; An Extension to the Attribute-Based Approach*," forthcoming in *Marketing Science*.
- Hillner, K. P., (1984). History and Systmes of Modern Psychology: A Conceptual Approach*. New York: Gardner Press.
- Hines, C., Ames.C., (2000). *Ethical consumerism - a research study conducted for the cooperative bank*. In: London: Mori.
- Hoch, Stephen J., Eric T. Bradlow, & Brian W,(1999), "*The Variety of an Assortment*," *Marketing Science*, 18 (4), 527-546Islamic Perspective: A Value-Maximization Approach. *Journal of Business Ethics*, 32, 127-142.
- Jacoby, J.,(2002). Stimulus-Organism-Response Reconsidered: An Evolutionary Step in Modeling (Consumer) Behavior. *Journal of Consumer Psychology*, 12, (1) 51-57.
- John B. W & Rosalie. R (1920).Conditioned emotional reactions. *Journal of Experimental Psychology*, 3(1), 1-14.
- Kahn, Barbara E., (2004), "Marketing in the 21st Century; Dynamic Relationships With Customers: High-Variety Strategies," *Journal of the Academy of Marketing Science*, 26 (Winter), 45-53
- Keller, K. L. (1993) Conceptualizing, Measuring, and Managing Customer-Based Brand Equity, *Journal of Marketing*, Chicago, 57, 1, 1-22.
- Keller, K. L. (1998) *Strategic Brand Management: Building, Measuring, and Managing brand equity*, upper saddle river, nj, prentice hall.
- Khouw, N. (2002), "*The meaning of color for gender*", *Colors Matters – Research*, available at: www.colormatters.com (accessed 11 November 2002).
- Kihlstrom, J. F., (1987). *The Cognitive Unconciuous*. *Science*, 237, (4821) 14451452.

- Klimchuk, Marianne R., & Krasovec, Sandra A. (2007). *Impact of package elements on consumer purchase*.
- Kotler, P. (2001). *Marketing Management*. 2nd Ed. Boston: Irwin, McGraw-Hill.
- Kotler, P. (2003) *Marketing management*, 9th ed. Upper Saddle River: Prentice-Hall.
- Kotler, P. 2010. *Marketing From Products to Customers to the Human Spirit*. Hoboken: NJ: John Wiley and Sons, Inc.
- Khan .A & Shad A.(2013). *Awareness and Satisfaction Level of the People in the Rural & Urban Areas of India & Bhutan in Line with Their Settlement Preferences in a Locality I.E. Urban or Rural*.
- Leichtling, C. (2002). *How color affects marketing*. Retrieved October 12, 2003, from <http://www.touro.edu/tabs/journal02/tabs5c.pdf>.
- Levin, I. P., Jasper, J. D., & Gaeth, G. J. (1996). *Measuring the effects of framing country-of origin information: A process tracing approach*. In K. Corfman & J. Lynch (Eds.), *Advances in consumer research XXIII* (pp. 385–389).
- Madden, J.T., Hewett, K., Roth, M.S., (2000), "Managing images in different cultures: a cross national study of colour meaning and preferences", *Journal of International Marketing*, 8, 4, 90-107.
- Mogilner, Cassie, & Jennifer Aaker (2008), "The 'Time vs. Money Effect': Shifting Product Attitudes and Decisions through Personal Connection," *Journal of Consumer Research*, 36(August), 277–91.
- Moital, M. L.,(2007). *An Evaluation of the factors influencing the adoption of ecommerce in the purchasing of leisure travel by the residents of Cascais, Portugal*. In: Bournemouth University.
- Mugenda, O.M & Mugenda, A.G (2003) *Research Methods, Quantitative & Qualitative Approaches*, Acts Press, Nairobi 26. Mungai,
- Mutsikiwa, M. & Marumbwa, J.,(2013). *The Impact of Aesthetics Package Design Elements on Consumer Purchase Decisions: A Case of Locally Produced Dairy Products in Southern Zimbabwe*. IOSR- Journal of Business and Management, 8(5), pp.64-71.
- Neisser, U., (1967). *Cognitive Psychology*. New York: Appleton-Century-Crofts.
- Nilsson, Johan & Ostrom, Tobias. (2005). *Packaging as a Brand Communication Vehicle*. Thesis of Lulea University of Technology.
- Nilsson, T., Tuncer, B. & Thidell, A. (2004) The use of eco-labelling like initiatives on food products to promote quality assurance – Is there enough credibility, *Journal of Cleaner Production*, 12, 517-527.
- Nye, R. D., (1979). *What is B.F. Skinner really saying?* In: New York: Prentice-Hall

- Prathiraja P & Ariyawardana A. (2003), impact of nutritional labeling on consumer buying behavior, *SriLankan Journal of agricultural economics*. Vol. 5, No. 1, 2003.
- Panwar, J.S., (2004), "*Beyond Consumer Marketing: Sectoral Marketing and Emerging Trends*", Tejeshwarsingh for response books, typeset in 10 pt, New Delhi.Pride M William. Ferrell o.c, 1997, *Marketing concepts and strategies*, McGraw-Hill.
- Pinya,S.(2004). *Packaging and purchase decisions*. Br. Fd. J., 106(8): 607-628.N
- Prendergast, P.G., Marr, N.E., (1997), "*Generic products: who buys them and how do they perform relative to each other?*", *European Journal of Marketing*, 31, 2, 94-109.
- Raghubir, P., Krishna, A., (1999), "*Vital dimensions in volume perception. Can the eye fool the stomach?*",*Journal of Marketing Research*, 36, 3, 313-26.
- Ranjbarian, Bahram. (2009), *Marketing and market management*, Tehran, Bazargani printing and publishing company.
- Rentie, R., Brewer, C. (2000)The verbal and visual components of package design, *Journal of Product and Brand Management.*, Vol.9.
- Rettie, R., & Brewer, C. (2000). The verbal and visual components of package design. *Journal of Product Brand Management*, 9 (1), 56-70.
- Ribeaux, P &Poppleton.K., (1978). *Psychology and Work*. London: Macmillan Education
- Kuvykaite,R A.D., (2009). *Impact of package elements on consumer purchase decision economics and management*, pp: 441-458.
- Rundh, B. (2005). The multi-faceted dimension of packaging. *British Food Journal*, 107 (9), 670-684.
- Saeed, M., Ahmed, Z. U, and Mukhtar, S-M. (2001), 'International marketing ethics from an Islamic perspective: a value-maximization approach', *Journal of Business Ethics*, 32, 127-42
- Schiffman, L. G. (2007). *Consumer Behavior*. 9th ed. New Jersey: Prentice Hall.
- Schoell, William. F., (1985), "*Marketing: Contemporary Concepts and Practices*", 2th edition, Allyn and Bacon,United State of America.
- Sekaran, U.(1983).Methodological and theoretical issues and advancements in cross-cultural research. *Journal of International Business*,61-73.
- Shimp, Terence A. (2000). *IMC in Advertising and Promotion*, Pearson Prentice Hall.
- Sial, M. F., Gulzar, A., Riaz, N. & Nawaz, B. (2011). Impact of labeling and packaging on buying behaviour of young consumers with mediating role of

- brand image. *Interdisciplinary Journal of Contemporary Research in business*, 3(8): 1022-1026.
- Silayoi and Speece (2009). Packaging and purchase decision: An exploratory study on the impact of involvement level and time pressure. *British food journal*, 106(8), 677-690
- Silayoi P, Speece M (2007). *The importance of packaging attributes: a conjoint analysis approach*. *Eur.J. Mark.*,41(11/12): 1495-1517. Statistics South Africa (2010). General household survey 2009.
- Silayoi, P., & Speece, M. (2004). Packaging and purchase decisions: An exploratory study on the impact of involvement level and time pressure. *British Food Journal*, 106 (8), 607-628.
- Silayoi, P., & Speece, M. (2007) The importance of packaging attributes: a conjoint analysis approach. *European Journal of Marketing*, 41 (11/12), 1495- 1517.
- Singh. S.(2006) *Impact of color on marketing*. *Management Decision* Vol. 44 No. 6, 2006 pp. 783-789 q Emerald Group Publishing Limited 0025-1747
- Skinner, B. F., (1938). *The behavior of organisms*. An Experimental Analysis. In: New York: Appleton-Century
- Smith, P., & Taylor, J. (2004). *Marketing communications: an integrated approach* (4th edition). London: Kogan Page.
- Smith, P.R. (1993). *Marketing Communication: An Integrated Approach*. London: Kogan Page Limited.
- Solomon, M.& Bamossy.K,(2006). *Consumer Behaviour: A European Perspective*. 3rd ed. Harlow: Prentice Hall.
- Sternberg, R.J.,&Lubart,T.I.(1996).*Investing in creativity*. *American Psychologist*, 51(7), 677 688.
- Stewart, J., (1994). *The psychology of decision making*. In: D. Jennings and s. wattam, eds. *Decision Making: an Integrated Approach*. London: Pitman
- Taleghani, Mohammad, (2011).”The Relationship between customer satisfaction and relationship marketing benefits”, *Arabian Journal of Business and Management Review*, 1(3), 78-86.
- Thøgersen, J. (2000), Psychological Determinants of Paying Attention to Eco Labels in Purchase Decisions: Model Development and Multinational Validation, *Journal of Consumer Policy*, 23, 285-313.
- Thøgersen J (1999), the ethical consumer moral norms and packaging choice. *Journal of consumer policy Kluwer Academic Publishers. Printed in the Netherlands*. Volume 22, Number 4(1999), 439-460,

- Tversky, A. and Kahneman, D. (1981), ``*Framing of decisions and the psychology of choice*'', *Science*, Vol. 211, pp. 453-8.
- Twede, Diana, and Susan Selke, (2005). *Cartons, Crates and Corrugated Board*. 1st ed. Lancaster, PA: DEStech Publications, Inc
- Underwood, R. L. (2003). The communicative power of product packaging: creating brand identity via lived and mediated experience. *Journal of Marketing Theory and Practice*, Winter, 62-76.
- Underwood, R. L., Klein, N. M., & Burke, R. R. (2001), " Packaging communication: attentional effects of product imagery", *Journal of Product & Brand Management* , Vol.10 (7),pp. 403-422.
- Underwood, R. L., Klein, N. M., & Burke, R. R. (2001). Packaging communication: attentional effects of product imagery. *Journal of Product & Brand Management*, Volume 10, Number 7, 2001, pp. 403-422
- Vila, N., & Ampuero, O. (2007). The role of packaging in positioning an orange juice. *Journal of Food Products Marketing*, 13 (3), 21-48.
- Vila, O.A., (2006). Consumer perception of packaging. *Journal of consumer marketing*, pp: 100-112.
- Wells, L. E., Farley, H., & Armstrong, G. A. (2007). The importance of packaging design for own-label food brands. *International Journal of Retail & Distribution Management*, 35 (9), 677-690
- Wells, William. Moriarti, Sandra & Burnett, John. (2006). *Advertising Principles and Practice* (7th ed). New Jersey: Pearson Prentice
- Witte, K. (1992). *Putting the fear back into fear appeals*. The extended parallel process model. *Communication Monographs*, 59, 329-349.
- Youtz, R. (1998). *Colour effect on society*. *Scientific American*, 6(4).
- Zhang, Y. and Buda, R. (1999), ``The moderating effects of need for cognition responses to positively versus negatively framed advertising messages'', *Journal of Advertising*

APPENDICES

APPENDIX II: LETTER OF PERMISSION TO CARRY OUT RESEARCH WORK

Kabarak University

Private Bag,

KABARAK

Dear Sir/Madam,

RE: PERMISSION TO CARRY OUT ACADEMIC RESEARCH

I am a Master of Business Administration student at Kabarak University conducting a research study entitled **“INFLUENCE OF PRODUCT PACKAGING ATTRIBUTES ON CHOICE OF DETERGENTS PURCHASED BY CONSUMERS IN NAKURU COUNTY, KENYA”**. The purpose of this letter is to request you for permission to interview members of your organization using the questionnaire copies attached. You are kindly requested to fill in the questionnaire with precision and accuracy. The questionnaire is supposed to assist in answering specific objectives of the research which is being undertaken as part of the University requirement. Any information given herein will be treated with utmost confidentiality and only be used for the purpose of research. So kindly feel free to fill the questionnaire.

Thank you.

Yours faithfully,

Lucyann Muthoni Karani

Appendix II: Research Questionnaire

SECTION A: General information

No.....

Kindly indicate your gender

Male []

Female []

Please indicate your age from the choices below

Below 25 years []

26-35 years []

36-45 years []

Above 45 years []

Kindly indicate your highest academic qualification

Primary school level []

Secondary school []

College []

University level []

Any other (please specify).....

Please indicate how long have you been shopped in the supermarket.

Less than 1 year [] Over 5 years []

1 to 3 years []

3 to 5 years []

SECTION B:

Influence of product packaging and consumer choice.

8. The following statements relate to the color of the detergent you have chosen .
Using the scale below, please indicate your level of agreeableness with the statement.

Strongly Agree [5]

Agree [4]

Moderately Agree [3]

Disagree [2]

Strongly disagree [1]

Statement	5	4	3	2	1
The Colour of the package is the first thing which I look at when purchasing a detergent.					
The choice of colour of detergents' package signify my personality					
I associate the colour of the detergent package with its performance.					
Detergents with bright coloured packaging readily attract my attention.					
Detergents with dark coloured packaging do not attract my attention.					
The colour of detergent package does not matter to me.					
The colour of the detergent package assists me to distinguish it from the rest.					

SECTION C

Influence of detergent quality of material on consumer behaviour

The following factors relate to detergent quality of material on consumer behaviour .

Using the scale below please indicate your level of agreableness the statement.

Strong Agree [5]

Disagree [2]

Agree [4]

Strongly

disagree

[1]

Moderately Agree [3]

Statements	5	4	3	2	1
When purchasing a detergent, I look for a package with a container I can use for another purpose or easily refill					
When purchasing a detergent I go a package that I can dispose off easily after use.					
When purchasing a detergent I go for package am able to open and close easily.					
When purchasing a detergent I go for a package which is able to keep my detergent fresh for every use					
When purchasing a detergent I go for a package which cannot easily damaged by water					
When purchasing a detergent I go for a package which is able to show the level of the content inside.					

SECTION D

Influence of packaging size on consumer behavior.

The following factors relate to packaging size and consumer behaviour. Using the scale below, please indicate your level of agreeableness to the statement.

Strong Agree [5]

Agree [4]

Disagree [2]

Moderately Agree [3]

	5	4	3	2	1
I prefer detergents in large pack to enable to use it for long period of time					
I prefer detergents packed in small sachets for short term use and necessitate a rebuy					
Products in larger sizes seems to be of high quality					
Detergents in small sizes results to poor handling and use.					
Detergents in small sizes are of no economic value					
Products in large sizes reduce inconveniencies in use.					

SECTION E

Effect of product label on packaging on consumer purchase

12. The following factors relate to labeling information. Using the scale below, please indicate your level of agreeableness with the statement.

Statements	5	4	3	2	1
I prefer a product with clear legible labels and writing					
From a label I easily distinguish one brand from another					
I prefer a product with information on: usage and application, ingredients, expiry dates, weights on the label.					
I prefer a product with a label I can easily read and understand					
I prefer a product with a label showing how to easily dispose after use					
I prefer a detergent showing conditions of use and storage instructions					

Strong Agree [5]

Agree [4]

Disagree [2]

Moderately Agree [3]

Strongly disagree [1]

SECTION F

Consumer Purchase Behavior

Make a judgment of how purchase decisions have been easy and successful during your shopping session. Please mark the level of ease the shopping has been as a result of detergent packaging using the scale below .

Strong Agree [5] Agree [4] Moderately Agree [3] Disagree [2] Strongly disagree [1]

	5	4	3	2	1
During shopping session colour of the package influence my choice of the detergent					
During shopping session material of the package influence my choice of the detergent					
During shopping session size of the package influence my choice of the detergent					
During shopping session label information on the package influence my choice of the detergent.					