

**THE INFLUENCE OF MARKETING MIX VARIABLES ON  
CONSUMER BUYING BEHAVIOR OF INSECTICIDES  
TREATED BED NETS IN NAIROBI COUNTY**

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## DECLARATION

I hereby declare that this project is my original work and which has not been submitted for the award of any other degree of the university, except where due acknowledgement has been made in the text.

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The research project has been submitted with my approval as the University of Nairobi Supervisor.

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## **DEDICATION**

I dedicate this thesis to my parents and my entire family and friends who have been there for me through it all and who have supported me over the years.

## **ACKNOWLEDGEMENT**

I wish to acknowledge my supervisor Prof. Francis Kibera for the coaching and leadership towards the realization of this project. As my advisor, he provided detailed guidance and encouragement throughout the course and conducting the research.

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## **ABSTRACT**

Promoting and advocating for the use of long lasting insecticidal nets (LLINs), otherwise known as treated bed nets, is of great importance since they have the potential for protecting human beings against mosquito bites causing malaria. The objective of this study was to determine the influence of marketing mix on consumer buying behavior of Long Lasting Insecticidal Nets (LLINs) in Nairobi County. This study used descriptive research design. The target population of this study comprised of all household in Nairobi that shop in the ten major supermarkets in Nairobi. A list was obtained from the Nairobi City Council Department of Licensing which reveals supermarkets operating in this area. Due to the homescedasticity of the target population the study adopted a sample size of 10 consumers in every supermarket. This gave a sample size of 100 respondents from the study. The study used questionnaires in order to collect data. The questionnaire had both open and close ended questions. The completed questionnaires were checked for completeness to ensure consistency. The study established that the brand name of insecticide treated nets influences the customer choice of the net they purchase. Majority of the respondents also agreed that the durability of the insecticide treated, the insecticide treated nets manufacturer's reputation, the popularity and the strength of the mosquito treated influenced their choice of decision. The study also established that the majority of the respondents view price of a product is a reflection of its ease of use and status, its usefulness, its performance, its durability and its status. The study concludes that pproduct influences the behaviour of consumers to a great extent. The study concludes that the quality, packaging and the brand name of the product influence the consumers' behaviour. The study also concludes that the reliability, durability and strength of the treated net influence the consumers' behaviour. On the price, the study concludes that there is a significant relationship between the price of the net and the consumers' choice of behavior. The study concludes that consumers review the price of the net before the purchase and that the associate the high prices with the quality. On distribution, the study concluded that there is a significant relationship between the distribution and the consumers' behavior. The study concludes that consumers will purchase nets that are locally available, widely distributed across the country, well displayed and those that are well established in the Kenyan market. The study concludes that the display of the mosquito treated net, advertisement on radios/TVs/ billboard, sales promotional offer and recommendation from friends influence the consumers' decision to purchase the nets. This study recommends that the various mosquito treated nets in the country should ensure that there mosquito nets are of high quality so as to give them leverage against the consumers. The study also recommends that the companies take up advertising through increased television advertisements and billboards.

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# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1 Background of the Study**

Consumer behavior refers to a series of activities directed toward the acquisition, use and disposal of goods and services occurs (Salomon, 2004). It is a decision making process of an individual physically by engaging in assessing, buying and using or disposing the goods and services. Consumer behavior is to understand how a consumer makes decision to buy a good using the available resources such as time, money, and effort for buying, using, and disposing goods and services. It facilitates a better understanding and forecasting not only of the subject of purchases but also of purchasing motives and purchasing frequency (Schiffman, 2004). Marketing, as the term is commonly understood today, was developed initially in connection with the selling of consumer-packaged goods and later with the selling of industrial goods. The Committee on Definitions of the American Marketing Association (AMA) defined marketing as the performance of business activities that direct the flow of goods and services to the consumer (Alexander, 1960).

The marketing mix is the combination of the four controllable variables—product, place, promotion, and price (the four Ps). These four variables help the firm in making strategic decisions necessary for the smooth running of any product / organization. These variables are product; price; place and promotions. The first P relates to product in terms of the product itself, quality, how different it is from other products among other features. The second P stands for price which refers to the consideration foregone by the customer to

acquire the product. The third P reflects place in terms of where and when the product can be found while the fourth P reflects the promotion in terms of creating and promoting the level of awareness among customers of the product.

The market place was changing radically as a result of major environment force such as technological advances, globalization and deregulation (Kotler, 2003). It is not news to even the most casual observer of the financial services industry that these are challenging times for financial institutions. The pace of change and the growing complexity around are breathtaking. The information technology revolution, globalization, increasing buying sophistication and significant demographic changes are driving forces behind these changes.

The study is anchored on two theories including open systems theory and the resource based theory. The open systems theory argues that organizations are open systems which require inputs from the environment and discharge their output into the environment. This therefore means that organizations are environmental dependency (Salomon, 2004). The resource-based view (RBV) as a basis for the competitive advantage of a firm lies primarily in the application of a bundle of valuable tangible or intangible resources at the firm's disposal. To transform a short-run competitive advantage into a sustained competitive advantage requires that these resources are heterogeneous in nature and not perfectly mobile. Through availability of resources, firms will be able to execute the four Ps successful for the competitiveness on the market place.

Promoting and advocating for the use of long lasting insecticidal nets (LLINs), otherwise known as treated bed nets, is of great importance since they have the potential for

protecting human beings against mosquito bites causing malaria. Their benefit to individual users at household level and to the health sector and society as a whole has been verified by various large-scale bednet intervention programmes in malaria endemic countries of sub-Saharan Africa. LLIN is one of the key malaria control measures in endemic countries in order to reach the Millennium Development Goal which targets to reverse the incidence of malaria by 2015.

### **1.1.1 Marketing Mix Variables**

Watkins (2002) points out that marketing is a very important function in an organization in that it focuses the management attention on customers and what they want. Ensures that the management concentrates on satisfying the needs and wants of the selected, specific target markets and it also helps in the achievement of business plans by providing customers with tailored solutions and thus giving customer satisfaction. An organization will only be effective and efficient if its marketing activities meet the perceived and desired benefits of its clients. Thus it's critical for marketing and senior management in organizations to be well endowed with marketing to continue to adapt and align its resources to the ever-changing environment.

Kotler and Keller (2006) noted that the market place isn't what it used to be, that is it is different as a result of major interlinking societal forces that have created new behaviors, opportunities and new challenges. They pointed out the following forces to the changing environment: Changing Technology, Globalization, Deregulation, Privatization, and Customer Empowerment. Need for greater profitability and heightened Competition. Payne (2004) points out that marketing, in this competitive marketplace, has become a

key differentiator between corporate success and failure. In addition to competition he has mentioned other forces in the market place as deregulation and privatization. He has further pointed out that the market place is ever changing and its dynamism results to new opportunities and threats that require a strong marketing ability to manage them.

### **1.1.2 Consumer Behavior**

Consumer behavior shows the relationship between individuals, groups, or organizations and the processes they use to select, secure, and dispose of products, services, experiences, or ideas to satisfy needs and the impact that these processes have on the consumer and the society at large (Kuester, 2012). It is not just the buying of goods/services that receives attention in consumer behavior but, the process starts much before the goods have been acquired or bought. A process of buying starts in the minds of the consumer, which leads to the search for alternatives between products that can be acquired with their relative advantages and disadvantages.

Consumer behavior is a complex pattern and sophisticated understanding for marketing research. Simply stated it is the study of psychological, social and physical actions when people buy use and dispose products, services, ideas and practices (Solomon, 2006; Blackwell et al., 2001; Peter & Olson, 2008). Basic idea behind the consumer research is questioning of buying reasons. However researchers have to go deeper and also ask people how and in which circumstances purchase and consume (Blackwell et al., 2001) Consumer behaviour consists of ideas, feelings, experiences and actions of consumers with additional environmental factors like adverts, prices and comments. Furthermore, consumer behaviour is a dynamic process, because of the continuous changes in ideas,

perceptions and activities of consumers as individuals or in a group (Olson & Peter, 2008).

The search for alternatives involves internal and external research which informs the decision-making process for purchase and use of the goods by the customers. Organizations also need to understand the post purchase behavior which is important, since it gives a clue to the marketers whether the product is a success or not. Consumer behavior seeks to understand what the consumer thinks of the company's products and those of its competitors; how the product can be improved according to customers, how the customers use the product; what the customer's attitude towards the product and its advertising is and the role of the customer in his family.

According to Peter and Olson (2008), consumers should be analyzed by looking into three objects; affect and cognition, behaviour, environment and their relations between each other. Every single element can affect other elements or it can be a reason to realize. So, all elements should be considered when deciding for marketing strategy (Peter and Olson, 2008). Affect represents person's emotions concerning a product like admiring or hating, while cognition can be explained as mental activities such as learning, interpreting and evaluating. When people are exposed to stimuli, they have the image of objects, situations, people or experiences in mind. Every individual has own way of understanding, perceiving and explaining of the surroundings in his own environment. In some degree these specialties can be common depending on common attitude and beliefs. Affect and cognition are connected to each other intensively however they are originated totally in different ways as feelings and thoughts (Peter & Olson, 2008)

Due to the various explanations of consumer behaviour, Peter and Olson defined this term as overt consumer behaviour that means consumer activities which can be analyzed by quantitative and qualitative methods. Successes of marketing strategies pass through not only changing of this behaviour of the consumers but also affect and cognition. Although a person likes a product, it can be possible that s/he does not purchase it (Peter & Olson, 2008). Consumer environment is the surroundings and out side effects. All consumers are exposed to social pressure, culture, family, personal influence and situation effects (Blackwell et al., 2001).

Consumer behavior patterns are quite related to each other, specifically in the aspects like quality, pricing and decision making (Kumar, 2011). Saharudin et al. (2011) found that the business firms must precisely the relationship with regard to price, the buyer's own self concept and ownership position in a purchase decision. A deeper understanding regarding the quality is very important for every marketer. The customer satisfaction and quality products are parallel in relationships with price, expertise, timeliness, service and the physical environment (Lacobucci, Ostrom & Grayson, 1995).

Zeithaml (1988) found that perception of consumers of quality change over a time as a result of added information, increased by changing expectations and completion in a product category. The consumers base their purchasing decision on information indications and signals like product name, design and price (Samiee, 1994). The other major factors influencing buying behavior are basically cultural, social, personal and psychological.

### **1.1.3 The Retail Sector in Kenya**

The Retail Sector is comprised of establishments engaged in retailing merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. Retailing is the final step in the distribution of goods to consumers. In addition to retailing merchandise, some types of retailers engage in the provision of after sales services, such as repair and installation. New machines and equipment dealers, supermarkets, electronic and appliance stores and musical instrument stores are included among this group providing products and service.

Supermarkets started in upper-income niches in large cities of Kenya (Nairobi and Mombasa) and then spread into middle-class and then poorer consumer markets, and from large cities to secondary cities to towns within Kenya. Supermarkets have then spread from Kenya to poorer and less urbanized countries, like Uganda, Rwanda and South Sudan. Within these countries and also in Kenya, supermarkets are now slowly spreading to secondary cities and small towns. This study concerns itself with the mainstream Supermarkets. The mainstream Supermarkets are defined as those supermarkets that employ more than fifty employees in their day to day operations (Njenga, 2006).

Supermarkets have also revolutionized the products they offer and are rapidly penetrating urban food retail in Kenya and spreading well beyond their initial tiny market niche into the food markets of lower-income groups (Kiumbura, 2003). Having penetrated processed and staple food markets much earlier and faster than fresh foods, they have recently begun to make inroads into the fresh fruits and vegetables category. The



important changes in their procurement systems bring significant opportunities and challenges for small farmers, and have implications for agricultural diversification and rural development programmes and policies. Supermarket development in Kenya is currently in the medium stage where changes are taking place fast. Kenya is the second most advanced country in terms of presence of supermarkets in sub Saharan Africa, after South Africa. Kenya has over 406 supermarkets and 20 hypermarkets (Economic Survey, 2010). In the last ten years, the formal food and necessities retail sector has undergone massive transformation, with traditional retailers, including small shops and public markets, losing a significant proportion of the market share to supermarkets. There are at least six big Kenyan owned supermarkets, including Nakumatt (which is the largest), Uchumi (which has just come out of receivership), Tuskys, Naivas and Ukwala which is the smallest of the giants. Kenya's advancement in supermarkets is evident from the fact that its top five cities (Nairobi, Mombasa, Nakuru, Eldoret, and Kisumu) have at least 165 supermarkets and 13 hypermarkets (Economic Survey, 2010).

Supermarkets are quickly diffusing into small towns and secondary cities to target poorer consumers in Kenya, while expanding to other countries within the East African region. Uchumi and Nakumatt are now operating in Tanzania and Uganda in an attempt to broaden their annual turnover. The pattern of expansion in Kenya is similar to that of South Africa (Njenga, 2006). This pattern of first penetrating upper class urban market and then moving into lower income and rural-town markets shows that there will be a steady and rapid increase in supermarkets in East Africa. There used to be few supermarkets in Kenya, but their number is increasing quickly. All bigger cities and many smaller towns have them. Their quality is usually quite high, and higher than other

countries in the region. Next to Kenyan and other regional brands, many Western brands are lining up to compete for the Kenyan market as well. This study therefore aimed at investigating the strategic responses the successful large and medium supermarkets in Kenya are engaging in to counter the challenges brought about by changes in the external environment.

#### **1.1.4 Large Supermarkets in Kenya**

The retail sector in Kenya is dominated by a few large supermarkets and many small scale retailers. Traditionally, supermarkets are viewed as markets for rich consumers. For a long time, they were only found in large cities of the developed world and middle income countries. Nakumatt, Uchumi, Ukwala and Tuskys – the country's biggest supermarkets in terms of branch network and shopping traffic – have in the past few years expanded generously in a tight race for shoppers that has wound up in areas initially dominated by traditional channels like shops, kiosks and small supermarkets in small towns.

In Nairobi, the wars for market share have taken mainstream supermarkets from the usual commercial areas to residential places, where they are squaring off with newer and smaller entrants like Chandarana, Stagematt, Eastmatt and Naivas among others. With Kenya being the more affluent market in East Africa, its retail sector is more developed, but nearly hitting the slow lane, and the big players are looking beyond borders – exporting their wars to neighboring countries. Performance in the Retail Sector has relatively muted in the later part of the decade. Growth in retail trade was limited to less than 1% through 2008.

## **1.2 Research Problem**

Consumer behavior is defined as the behavior that consumers display in searching for, purchasing, using, evaluating and disposing of products and services that they expect will satisfy their needs. The preferences, choices and tastes of individual determine their purchasing behavior. There are other different factors that determine the consumer behaviours some of which marketers cannot control, such as cultural, social, personal, and psychological factors.

Supermarkets in Kenya have generally been enjoying tremendous growth in recent years. In the same vein, the environment has continually changed bringing more and more challenges to the players (Cofek, 2011). Various changes have been witnessed in the legal environment, competitive field, consumer needs and also in the area of technology. Responses have been seen such as acquisitions, competing regionally and changes in culture. In general the retail sector in Kenya has been undergoing significant growth both in countrywide and regional presence. These developments are an indicator that these institutions have engaged in designing strategic responses that are effective in countering the challenges brought about by the external environment. Majority of retail customers purchasing insecticide treated bed nets purchase from supermarket establishment making it a better place for this study.

Booth and Shepherd (1988) argued that cultural and economical factors, consumer's personality, attitudes, values and emotions, affect consumers' decision making process regarding food selection. Internationally, Gilaninia, Taleghani and Azizi (2013) examined marketing mix and consumer behavior in Kuwait. They indicate that consumer

behavior analysis is an important domain for a marketing manager as it gives insight into a number of factors which affect sales and relationships that are not in the control of a company. Haghshenas, Abedi, Ghorbani, Kamali and Harooni (2013) reviewed consumer behavior and factors affecting on purchasing decisions in Singapore and established the interest of the buyer and its relationship with the corporate marketing mix, opportunities for buyer's orientation from the perspective of consumer behavior can be obtained using this technique. Roy (2013) also examined the effect of green marketing on consumer behaviour – a study with particular reference to west Bengal (India). The results from this illustrates that companies need to increase their communication with the customers for going green, and that attributes like price and quality are more important than “environmental responsibility

Locally, Musyoki (2012) examined the factors influencing consumer buying behavior of General Motors East Africa's saloon vehicles and established that the level of income influences consumer buying behavior/ repurchasing power of the customer on the automotive of choice. Ng'ang'a (2012) researched on the generation y consumer behavior and its influence on the economic pillar of Kenya vision 2030 and concluded that most respondents would consider to a large extent investing in a business, buying a mobile phone and buying a laptop when they have extra cash. Maiywa (2013) did a study on the impact of green marketing on consumer buying behaviour in major supermarkets in Nairobi County. The study established that supermarkets endeavor to achieve some competitive advantage over their competitors in the dynamic business environment by using different marketing strategies that influence consumers to purchase green products and services. Green marketing strategy is one of the crucial strategies that cannot be left

out by competitive organizations. Social responsibility has become the drive of any successful organization in the global market. It can be concluded that, product strategy, pricing strategy, promotion strategy and distribution strategy of any company should emphasize on green marketing practices. From the above studies there is none that has concentrated on the relationship between marketing activities and consumer behaviour thus creating a research gap. This study sought to fill that gap by seeking answers to one research question: what are the marketing mix variables influencing consumer buying behavior of insecticide treated bed nets in Nairobi City County?

### **1.3 Research Objective**

To determine the influence of marketing mix on consumer buying behavior of Long Lasting Insecticidal Nets (LLINs) in Nairobi County

### **1.4 Value of the Study**

The study would be important to several stakeholders including the management of companies involved in the business of Long Lasting Insecticidal Nets (LLINs), the Government of Kenya policy makers and future researchers and scholars.

The management teams of Long Lasting Insecticidal Nets (LLINs) as well as other dealers in insecticide treated bed nets would also benefit from the findings of the study as it would provide a better understanding to the management on business activities influencing consumer buying behavior of insecticides treated bed nets.

Government agencies and policy makers could also use the results to formulate positive national policies on a framework that is relevant and sensitive to the market forces influencing the insecticides treated bed nets industry.

The study provided information to potential and current scholars on the business activities influencing consumer purchase behavior. This is because the study contributes to the already existing knowledge on consumer behaviour and market activities.

The study also extends the application on the theories of open system which explained organization-environmental dependency and the resource based view theory which argues that resources play an important role in the implementation of an organizations' strategy.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter summarizes the information from other researchers who have carried out research in the same field of study. It will discuss issues listed below.

#### **2.2 Theoretical Perspective of the Study**

Systems theory provides managers with metaphors, terminology and explanations about how organizations function. It has dominated as a framework for managerial behavior and organizational analysis (Peteraf, 1993). The rational systems perspective focuses on structure as a significant tool for the efficient achievement of organizational goals. It emphasizes the role of management in deciding such structures and determining the specific goals that are to be achieved. Hence, the focus is on formal structures, the specificity of goals, and the formalization of rules and roles (Wernerfelt, 1984). Open systems reflected the belief that all organizations are unique in part because of the unique environment in which they operate and that they should be structured to accommodate unique problems and opportunities.

Environmental influences that affect open systems can be described as either specific or general. The specific environment refers to the network of suppliers, distributors, government agencies, and competitors with which a business enterprise interacts (Grant, 2002). The general environment encompasses four influences that emanate from the geographic area in which the organization operates (Yaprak & Karademir, 2010). The open-systems theory assumes that all large organizations are comprised of multiple

subsystems, each of which receives inputs from other subsystems and turns them into outputs for use by other subsystems. The subsystems are not necessarily represented by departments in an organization, but might instead resemble patterns of activity (Dharanaj and Beamish, 2003).

The Resource Based View RBV originated from research that acknowledged the importance of organizational specific resources to firm success and was developed further by Penrose (1959) and Demstesz (1973). Further research has made significant contribution to its development (Barney, 1996). The Resource Based View (RBV) suggests that sustainable superior performance and competitive advantage of any firm is the result of the accumulation and utilization of resources, managerial choices, factor market imperfections and strategic industry factors (Hafsi & Ganthier, 2003). Firm heterogeneity instead of external environmental factors are considered relatively more important determinants of the performance and competitive position of a firm both in the local and international market place (Barney, 1991, Tseng et al, 2007; Lu et al., 2010). The Resource Based View (RBV) views firms as a combination of skills, resource and capabilities. The acquisition, integration and utilization of resources and capabilities are expected to influence the performance of firms. These resources are expected to be rare, inimitable, valuable and unbundable (Grant, 2002).

### **2.3 Influence of Marketing mix on Consumer Buying Behavior**

Payne (2004) points out that marketing, in this competitive marketplace, has become a key differentiator between corporate success and failure. In addition to competition he has mentioned other forces in the market place as deregulation and privatization. He has



further pointed out that the market place is ever changing and its dynamism results to new opportunities and threats that require a strong marketing ability to manage them. Most organizations are now embracing different aspects of marketing activities so as to remain relevant in the industry. They have developed different products to satisfy the different market segments. Kotler and Keller (2006) highlighted the need for businesses to come up with different products that are suitable for both the upper and lower end of the market. Price reductions due to competition within the industry, has seen increase in sales and customer base due to low pricing strategy. Other people often influence a consumer's purchase decision. The marketer needs to know which people are involved in the buying decision and what role each person plays, so that marketing strategies can also be aimed at these people (Kotler et al, 1994).

Strategic marketing management formulation involves selecting a specific target market and making decisions regarding the crucial elements of product, price, promotion and distribution so as to satisfy the needs of customers in that market. They are designed to provide total integration of efforts that focus on achieving the marketing objectives (Ferrell et al, 2002). Companies aim at choosing the "right" activities from among many possible alternatives. These possible strategies are dependent on the nature of product or service and also create a guideline as to which marketing activities the company should focus its efforts on (Majumdar, 1996). With marketing strategies in place, any challenge that a company comes face to face with can be tackled easily by applying those that are appropriate for the situation. This ensures that companies are not caught off-guard. Varying situations call for new survival techniques. The marketing strategy must fit the needs and purposes of the selected target markets, be realistic given the organization's

available resources and environment and should also be consistent with the organization's mission, goals and objectives (Kotler, 2003). A marketing strategy identifies customer groups which a particular business can better serve than its target competitors, and tailors product offerings, prices, distribution, promotional efforts, and services toward those market segments. Ideally, the strategy should address unmet customer needs that offer adequate potential profitability.

### **2.3.1 The effect of Product on Consumer Buying Behavior**

With the increase in competition and faster diffusion processes, this results in the shortening of Product life cycles hence new product launches have to be thoroughly planned, test marketing becomes popular and also packaging plays an important role (Majumdar, 1996). Product strategies may include concentrating on a narrow product line, developing a highly specialized product or service, or providing a product-service package containing unusually high-quality service. Also emphasized are innovation strategies, coming up with a range plan to create product variety as well as branding of products to differentiate them from competition (Atkinson & Wilson, 1996).

The quality of the product you produce, that will lead to a successful outcome in the long run for every in the world. In business there are five most important dimensions which make a successful business and these are service quality, tangible, reliability, responsiveness assurance and identification (Azadavar, Shahbazi & Teimouri, 2011). Also Satya (2011) found that it is compulsory for the firms to maintain their quality because people are more conscious of quality than price. Most of the Asian country consumers would want to have European or American product to have better quality, so

they always consider the “MADE IN” in their buying behavior (Abedniya, 2011). The assessment of consumer on a product based on quality is very essential characteristic in purchasing processes and consumers are conscious of quality difference of all products (Nugroho & Wihandoyo, 2009).

The consumers sometime go for better quality brand rather than considering of the price factor. The consumers are most likely to purchase famous but better quality brands in the market instead less known brand they also ready to pay higher prices for renowned brand (Boonlertvanich, 2009). Business goals will be easy to achieve if service quality can be treated as a construct different stages so understanding and assurance are the most important in service quality (Fogarty, Catts & Forlin, 2000). An effective business to business relationships for many firm service quality is more significant rather than product quality, these unique challenges achieve customer satisfaction (Rossomme, 2003). Quality is the major concern in every field of life, whether you buying some product or services. Tsiotsou (2006) found a positive direct effect of perceived quality on purchase intentions. The literature suggests that there is a significant role of product quality in buying behavior but it may vary from culture to culture.

### **2.3.2 The Influence of Price on Consumer Buying Behavior**

With the growing competition in the market, companies more often than not opt for niche strategies to serve specific areas in the market (Majumdar, 1996). They need to make a price-quality trade off to choose their consumers. The right price strategy is crucial for maximizing total revenue. Generally, higher prices mean lower volume and vice-versa; however, small businesses can often command higher prices because of their

personalized service. Some price strategies may aim at increasing a company's share growth or for market penetration purposes (Atkinson, 1996).

According to Kurtulus et al. (2005) the influence of consumer psychographics on their tendency to purchase retailer brands, that must be valid and reliable so the consumers are more price conscious and prefer and purchase retailer brands. Most of the consumers need convenience and quality products that strongly motivate them to buy the same product more frequently in the future (Ahuja, Gupta, & Raman, 2003). Ahmad and Vays, (2011) found that the pre decision time of consumer purchasing behavior recognized solid link with the desire purchasing Behavior of the consumers. The product price factor is always been an important factor in customer/consumer buying process in every context. They always examine price and brand name information differently when they are making judgments on the dimensions of quality: ease of use, usefulness, performance, durability, and status (Brucks, Zeithaml & Naylor, 2000)

The marketing managers have to think broader to have a common on two factors such as capability control and strategic dynamic pricing policies (Moe & Fader, 2009). The customer must be facilitated with some packages in products. Bie and Chiao (2001) found that the marketing managers should highlight the price fairness in total consumer satisfaction program. According to Chang and Wildt (1998) the price has its significant influence on perceived quality when it is the only information indicated available. According the study of consumer prefers to have a price rather than technical aspects in durable goods. In purchasing process consumer look for three main things prices, convenience, and recommendation by someone (Rehman et al., 2011).The basic

marketing tool of attention is price and the value of pricing can be measured into the effects of costs, markups, and side payments (Chintagunta, 2002). As previous studies also found that certain demographic groups such as females, married persons, old people and home workers are more responsible to examine for, and use, price information consciously. The literature suggests that price has great impact in consumer buying behavior very effectively. Every consumer needs more awareness regarding the price and fairness in price in the shape of packages and discounts.

### **2.3.3 The Role of Distribution on Consumer Buying Behavior**

The manufacturer and wholesaler must decide how to distribute their products. As competition becomes fierce, retailers and wholesalers will be wooed more assiduously. Loyalty in trade will go down. This calls for re-appraisal of the existing distribution channels and development of new channels as well as give thought to development plans and strategies (Majumdar, 1996). Working through established distributors or manufacturers' agents generally is easiest for small manufacturers. Small retailers should consider cost and traffic flow in site selection, especially since advertising and rent can be reciprocal: A low-cost, low-traffic location means spending more on advertising to build traffic.

Distribution (also known as the *place* variable in the marketing mix, or the 4 *Ps*) involves getting the product from the manufacturer to the ultimate consumer. Distribution is often a much underestimated factor in marketing (Majumdar, 1996). Many marketers fall for the trap that if you make a better product, consumers will buy it. The problem is that

retailers may not be willing to devote shelf-space to new products. Retailers would often rather use that shelf-space for existing products have that proven records of selling.

#### **2.3.4 The Influence of Promotion on Consumer Buying Behavior**

Promotion strategies play a vital role in the creation of mutually beneficial exchanges between producers and consumers of goods, services or ideas. To be effective, the promotional strategy must be guided by the marketing concept such as focusing on consumer needs and integrating all activities of the organization to satisfy those needs (Engel et al, 1991). Such strategies include advertising and direct customer interaction. Good salesmanship is essential for small businesses because of their limited ability to spend on advertising. Good telephone book advertising is also important. Direct mail is an effective, low-cost medium available to small business

Sales promotion is media or non media marketing pressure applied for a pre determined, limited period at the level of consumer, retailer or wholesalers in order to stimulate trials, increase consumer demand or improve product availability (Kotler, 2003). It is also a key ingredient in marketing campaign and consists of a diverse collection of incentive tools mostly short term, and designed to stimulate quicker or greater purchase of particular products or services by consumer or the trader (Kotler, 2003). According to Churchill and Peter (1995), sales promotion is designed to produce quick results that will not only boost sales in the immediate future, but will translate to loyal customers in the long run. Consumers have become more and more sophisticated as well as marketers in their bid to persuade the consumers and increase market share in the products and services they offer.

This persuasion comes in the form of discounts, free gifts, bonuses, free air time among other sales promotional activities.

Adcock et al. (2001) assesses that when a purchase decision is made, the purchase decision can be affected by unanticipated situational factors. Some of these factors according to them could be directly associated with the purchase, for instance the outlet where the purchase is to be made, the quality to be bought, when and how to pay. Most instances, firms remove the need to make this decision by either including the essentials in the form of sales promotion tools like coupons, discounts, rebates and samples. The additional benefit whether in cash or in kind offered to consumers through sales promotion is highly likely to influence their purchase behaviour or decision (Ngolanya, et al. 2006). After considering the possible options, the consumer makes a purchase decision and the consumer's choice depends in part on the reason for the purchase (Kotler et al, 2003). According to Kotler et al. (2003), the consumer may act quickly, especially if sales promotional tools are used or the consumer may postpone making any purchase. Whenever the consumer makes a purchase, they find out what products and services are available, what features and benefits they offer, who sells them at what prices, and where they can be purchased (Stanton et al., 1994).

The firms and its sales team provide consumers with the market information whenever they engage consumers in efforts to inform or persuade in an attempt to communicate with them. Sales promotion therefore provides a suitable link by providing consumers with samples of the products for them to test them in small quantities as well as provide consumers with most needed information concerning the product (Ngolanya et al; 2006).

According to Davidson et al, (1984), purchase decision may be between objective or emotional motives; nevertheless, in all cases, the sale is made or not made in the customers mind and not in the mind of the seller. A product is not purchased for its own sake but for its ability to satisfy a need. The use of some of these promotional tools helps in determining the use that consumers are likely to put the product into and therefore guide them towards the right product (Cox & Britain, 2000).The consumer is therefore provided with the relevant information, get the opportunity to try the product and get to know whether it satisfies their needs and also enjoy a price reduction.

Sales promotion is therefore used to draw consumers to the product and they end up making an impulse purchase as a result of the strength of the sales promotional tool (Ngolanya, et al, 2006).Berkowitz et al. (1994) proposed that, in the purchase decision process, at the recognition and the information search stage, the sales promotional tool that is most effective is the free samples because it helps gain low risk trials. According to them, consumers will be more likely to take the risk of trying a sample rather than buying the whole product and being disappointed. They further suggested that, at the alternative evaluation and the purchase decision stage, coupons, deals, point of purchase displays and rebates are suitable sales promotional tools because they encourage demand and repurchase of the same product by the consumer. They finally proposed that, at the post purchase stage, the best sales promotion tool would be the use of coupons, as they encourage repeat purchase from first time buyers.



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter sets out various stages and phases that were followed in accomplishing the study. Procedures and techniques that were used in the collection, processing and analysis of data were discussed. Specifically the chapter covered: research design, target population, sampling design, data collection instruments, data collection procedures and data analysis.

#### **3.2 Research design**

Kothari (2004) defines research design as the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. This study used descriptive research design. According to Gatara (2010), descriptive design is appropriate because it is less expensive and can enable the researcher to examine data from a wider area within a short time.

A descriptive design provides qualitative or numeric descriptions of trends, attitudes and perceptions of the population by studying a sample of that population (Kothari, 2008; Best & Khan, 2003). Since this study was interested in determining the influence of the independent variables on the dependent variable without manipulating any variable, the research design was suitable since it focused on the current phenomenon in regard to the influence of marketing activities and consumer buying behaviour of mosquito treated nets.

### **3.3 Target Population**

Mugenda and Mugenda (2003) define target population as that population the researcher studies, and whose findings are used to generalize to the entire population. Population is the entire group of individual's, events or objects having a common observable characteristic. The target population of this study comprised of all household in Nairobi that shop in the ten major supermarkets in Nairobi. A list was obtained from the Nairobi City Council Department of Licensing which reveals supermarkets operating in this area. This study used a census study where customers of all the major supermarkets will be used to determine the problem under investigation.

### **3.4 Sample Design**

Sampling involves any procedure that draws conclusions based on measurements of a portion of the entire population (Ethridge, 2004). According to Connaway and Powell (2010) a sample is usually drawn because it is less costly and less time consuming to survey than the population, or it may be impossible to survey the entire population. Mugenda and Mugenda (2003) indicate that a sample of 10-30% of the target population is considered adequate provided it is scientifically determined. However due to the homoscedasticity of the target population the study adopted a sample size of 10 consumers in every supermarket.

This gave a sample size of 100 respondents from the study. In statistics, a sequence or a vector of random variables is homoscedastic if all random variables in the sequence or vector have the same finite variance and thus will portray the same characteristics (Chandran, 2004). The respondents were selected randomly and thus each had an equal

chance of being selected. Simple random sampling technique was used because it presents every member of the population an equal chance of inclusion in the study.

### **3.5 Data Collection**

The study used questionnaires in order to collect data. Kirakowski (1998) defines a questionnaire as a method for the elicitation, recording and collecting of information. The questionnaires were used because they are inexpensive. The questionnaire had both open and close ended questions. Qualitative data was collected from open ended items while quantitative data was collected from closed ended items in the questionnaire.

The closed ended questions made use of a five point Likert scale where respondents were required to fill according to their level of agreement with the statements. The unstructured questions were used to encourage the respondents to give an in-depth response where close ended questions were limiting. The questionnaires were designed comprising of two sections. The first part included the demographic characteristics questions designed to determine the profile of the respondents while part two dealt with the identified independent variables.

### **3.6 Data Analysis**

Miller (1991) notes that in order to analyze collected data, a researcher needs to have the following information about the statistical data analysis tools namely: descriptive, inferential and test statistics. The completed questionnaires were checked for completeness to ensure consistency. Qualitative data was analyzed by deductive and inductive approaches while quantitative data will be analyzed descriptively using

Statistical Package for Social Statistics (SPSS, V. 21.0) to determine the Marketing activities influencing consumer buying behavior of insecticide treated bed nets in Nairobi County. The findings were presented by use of tables and Graphs. In addition, the study used inferential statistics that involved multiple regression analysis.

The regression equation:  $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$

Whereby  $Y$  = Consumer Behaviour

$X_1$  = Product

$X_2$  = Price

$X_3$  = Distribution

$X_4$  = Promotion

$\varepsilon$  = Error Term

## CHAPTER FOUR

### DATA ANALYSIS, RESULTS AND DISCUSSION

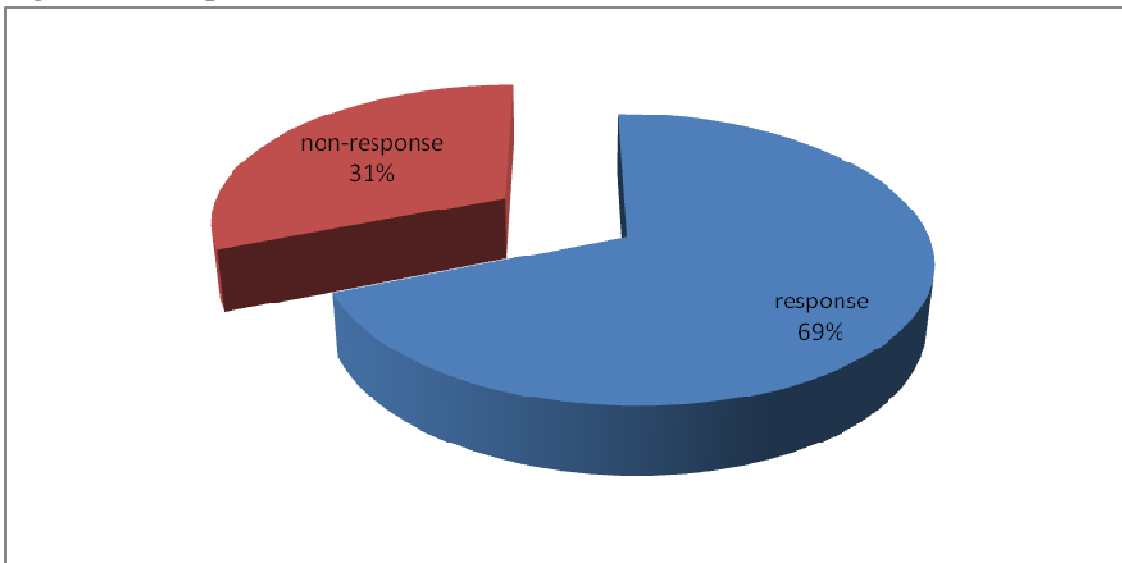
#### 4.1 Introduction

This chapter presents the findings of the study. The findings will be presented in tables and charts.

#### 4.2 Response Rate

The study targeted a sample size of 100 respondents. Of the targeted 100 respondents, 69 filled and returned their questionnaires. This gave a response rate of 69%. According to Mugenda & Mugenda (2003) the statistically significant response rate for research analysis should be at least 50% as shown in Figure 4.1:

**Figure 4.1: Response Rate**



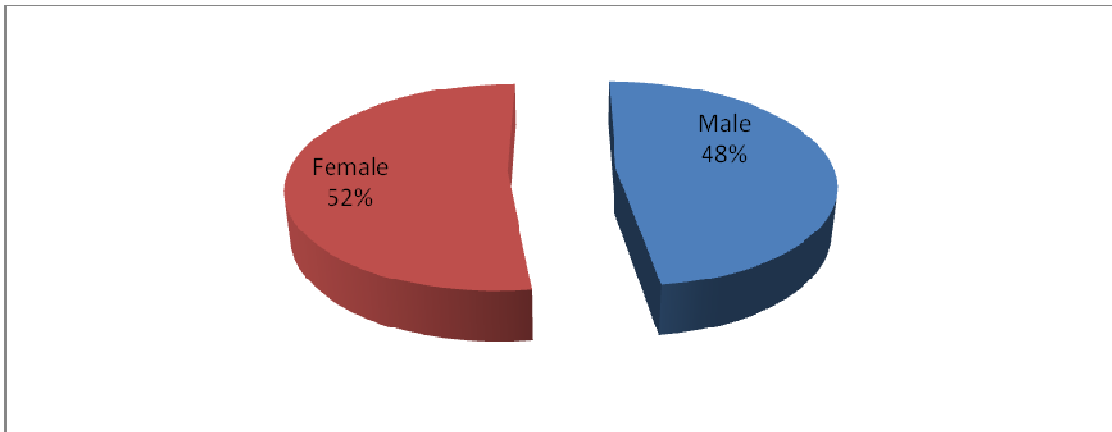
Source: (Research Data, 2014)

### 4.3 Respondents' Profile

#### 4.3.1 Gender

The study sought to establish the gender of the respondents. The findings are shown in the Figure 4.2:

**Figure 4.2: Gender of the respondents**



**Source: (Research Data, 2014)**

The findings show that 52% of the respondents were female and 48% were male. The study involved both genders in the study although the females were the majority.

#### 4.3.2 Age Categories

The respondents were asked their age. Table 4.1 shows the responses

**Table 4.1: Age Categories**

	<b>Frequency</b>	<b>Percentage</b>
Up To 20years	12	17
21-25 Years	8	12
26- 30yrs	15	22
31-35 Yrs	5	7
36- 40 Years	14	20
41- 50 Years	11	16
Above 50 Years	4	6
<b>Total</b>	<b>69</b>	<b>100</b>

**Source: (Research Data, 2014)**

The respondents who were aged below 20 years were 17%, 12% were aged between 21-25 years and 22% of the respondents were aged between 26-30 years. The respondents who were aged 31-35 years were 7%, 20% were aged 36-40 years, 16% were aged 41-50 years and only 6% were above 50 years.

#### 4.3.3 Level of Education

The study sought to establish the respondents' level of education. The findings are shown in table 4.2

**Table 4.2: Level of Education**

	Frequency	Percentage
KCSE Certificate	11	16
Technical Certificate	15	22
Bachelor's Degree	16	23
Master's Degree	10	14
Other	17	25
Total	69	100

**Source: (Research Data, 2014)**

The respondents who were KCSE certificate holders were 16%, 22% had technical certificate, 23% had bachelors degree, 14% had masters degree and 25% said they had other qualifications.

#### 4.3.4 Frequency of Purchases

The study sought to establish how often the respondents purchased in their respective supermarket.

**Table 4.3: Frequency of Purchases**

	Frequency	Percentage
Daily	38	55
Weekly	20	29
Monthly	11	16
Total	69	100

**Source: (Research Data, 2014)**

From the responses, the respondents who shop at their supermarkets daily were 55%, 29% shopped weekly while 16% shopped monthly.

#### 4.4 Influence of Product on Consumer Behavior

The respondents were asked the extent to which they agreed on the statements in table 4.4 on the influence of product on consumer behavior.

**Table 4.4: Influence of Product on Consumer Behavior**

	Mean	Std. Dev
The quality of insecticide treated nets is a key determinant in my purchase of a mosquito net	4.652	0.001
The packaging of the insecticide treated net influences my decision to purchase a mosquito net	3.987	0.213
The brand name of insecticide treated nets influences my choice of the net I purchase	3.665	0.542
The value of the products I more important than the cost	4.231	0.158
The reliability of insecticide treated nets influence my choice of the insecticide Mosquito net to buy	4.562	0.962
The durability of the insecticide treated nets is a key determinant of my decision on the net I purchase	4.772	0.333
The color variety of insecticide treated nets influences my choice of the mosquito net brand I purchase	3.421	0.145
The strength of the insecticide treated nets influences the brand I purchase	4.015	0.452
The popularity of insecticide treated nets influences my mosquito net purchase decision	3.776	0.662
The insecticide treated nets manufacturer's reputation on the market influences my decision on the nets	4.011	0.174

**Source: (Research Data, 2014)**

On whether the quality of insecticide treated nets is a key determinant in my purchase of a mosquito net the respondents strongly agreed with a mean of 4.652. Kotler and Keller (2006) cited that it is important for companies to come up with products that are of good quality and thus suite the need of the consumers. The respondents also agreed that



packaging of the insecticide treated net influences my decision to purchase a mosquito net with a mean of 3.987 and also agreed that the brand name of insecticide treated nets influences my choice of the net I purchase with a mean of 3.665. According to Atkinson & Wilson (1996), companies should provide product whose packaging contains unusually high-quality service. He also emphasized on branding of products to differentiate them from competition. Asked whether the value of the products I more important than the cost the respondents agreed with a mean of 4.231 and strongly agreed that the reliability of insecticide treated nets influence my choice of the insecticide Mosquito net to buy with a mean of 4.562. The reliability of a product is one of the important dimensions that make a business successful (Azadavar, Shahbazi, &Teimouri, 2011). On the durability of the insecticide treated nets is a key determinant of my decision on the net I purchase, the respondents strongly agreed with a mean of 4.772. The respondents were neutral on whether the color variety of insecticide treated nets influences my choice of the mosquito net brand I purchase with a mean of 3.421. The respondents also agreed that the strength of the insecticide treated nets influences the brand purchase with a mean of 4.015 that the popularity of insecticide treated nets influences my mosquito net purchase decision with a mean of 3.776 and that the insecticide treated nets manufacturer's reputation on the market influences my decision on the nets with a mean of 4.011. Also Satya (2011) found that it is compulsory for the firms to maintain their quality because people are more conscious of quality than price. Thus the quality of the product you produce, that will lead to a successful outcome in the long run.

#### 4.4.1 Extent of Influence of Product

The study sought to establish the extent to which product brand influences the consumers' choice of purchasing. The findings are shown in table 4.5.

**Table 4.5: Extent of Influence of Product**

	Frequency	Percentage
Very Great Extent	33	48
Great Extent	28	41
Moderate Extent	4	6
Little Extent	1	1
No Extent At All	3	4
Total	69	100

**Source: (Research Data, 2014)**

The respondents who said that product influenced their behavior to a very great extent were 48%, 41% said to a great extent, 6% said to a moderate extent, 1% said to a little extent and 4% said to no extent at all. Majority of the respondents said that the product was a great influence to their consumer behavior. Quality is the major concern in every field of life, whether you buying some product or services. Tsotsou (2006) found a positive direct effect of perceived quality on purchase intentions

#### 4.5 Influence of Price on Consumer Behavior

The respondents were asked the extent to which they agreed on the statements below on the influence of price on consumer behavior.

**Table 4.6: Influence of Price on Consumer Behavior**

	Mean	Std. Dev
I review the prices of insecticide treated nets before deciding on which brand to purchase	4.611	0.005
I associate higher prices with high quality of insecticide treated nets	4.231	0.214
I use the prices to determine which insecticide treated nets to purchase	4.031	0.114
Price differentiations are key determinants of my insecticide treated nets purchase decision	3.441	0.251
The price of a product is a reflection of its ease of use, , and status	3.051	0.632
The price of a product is a reflection of its usefulness,	3.456	0.224
The price of a product is a reflection of its performance	4.141	0.621
The price of a product is a reflection of its durability,	4.354	0.452
The price of a product is a reflection of its status	3.985	0.334
There is need for pricing controls and policies on insecticides treated bed nets	4.687	0.224
I prefer to have a price rather than technical aspects in durable goods	2.114	0.362

**Source: (Research Data, 2014)**

On whether the customer reviews the prices of insecticide treated nets before deciding on which brand to purchase, the respondents agreed with a mean of 4.611. According to Majumdar (1996), companies need to include strategies that will serve specific areas in the market by offering price-quality trade off to choose their consumers. The respondents also agreed that they associate higher prices with high quality of insecticide treated nets with a mean of 4.231. On whether customers use the prices to determine which insecticide treated nets to purchase, the respondents agreed with a mean of 4.031. The respondents were neutral on whether price differentiations are key determinants of their insecticide treated nets purchase decision, with a mean of 3.441. However Kurtulus et. al (2005) cited that most customers are price conscious. On whether the price of a product is a reflection of its ease of use, and status, the respondents were neutral with a mean of

3.051. On whether the price of a product is a reflection of its usefulness, the respondents were also neutral with a mean of 3.456.

Asked whether the price of a product is a reflection of its performance, the respondents agreed with a mean of 4.141 and also agreed that the price of a product is a reflection of its durability, with a mean of 4.354. Brucks, Zeithaml & Naylor (2000) concluded that consumers always examine price and brand name information differently when they are making judgments on the dimensions of quality: ease of use, usefulness, performance, durability, and status. Asked whether the price of a product is a reflection of its status, the respondents agreed with a mean of 3.985 and also strongly agreed that there is need for pricing controls and policies on insecticides treated bed nets with a mean of 4.687. The respondents disagreed that they prefer to have a price rather than technical aspects in durable goods, with a mean of 2.114. These findings are consistent with those of Moe & Fader (2009) who cited that marketing managers have to think broader to have a common on two factors such as capability control and strategic dynamic pricing policies

#### **4.5.1 Extent of Influence of Price**

The study sought to establish to what extent the price affects the consumers' choice of product. The findings are shown on Table 4.7:

**Table 4.7: Extent of Influence of price**

	Frequency	Percentage
Very Great Extent	23	33
Great Extent	34	49
Moderate Extent	7	10
Little Extent	3	4
No Extent At All	2	3
Total	69	100

The respondents who said that the price influences their purchase of product to a very great extent were 33%, 49% said to a great extent, 10% said to a moderate extent, 4% said to little extent and 3% said to no extent at all. The basic marketing tool of attention is price and the value of pricing can be measured into the effects of costs, markups, and side payments (Chintagunta, 2002).

#### 4.6 Influence of Distribution on Consumer Behavior

The study sought to establish the extent to which the respondents agreed on the statements in table 4.8 on the distribution of consumer behavior.

**Table 4.8: Influence of Distribution on Consumer Behavior**

	Mean	Std. Dev
I purchase insecticide treated nets that are readily available	4.542	0.152
I prefer purchase insecticide treated nets which are widely distributed all over the country	4.231	0.412
I prefer purchasing insecticide treated nets that are well displayed	3.445	0.221
I prefer purchasing insecticide treated nets that are well established on the Kenyan market	4.023	0.162

On whether consumers purchase insecticide treated nets that are readily available, the respondents strongly agreed with a mean of 4.542. Distribution involves getting the product from the manufacturer to the ultimate consumer. Majumdar (1996) cited that companies need to ensure that there is a clear distribution channel so that all the products can get to the consumers. On whether consumers prefer to purchase insecticide treated nets which are widely distributed all over the country, the respondents agreed with a mean of 4.231. Asked whether the respondents preferred purchasing insecticide treated nets that are well displayed, the respondents were neutral with a mean of 3.445.

On whether the respondents prefer purchasing insecticide treated nets that are well established on the Kenyan market, the respondents agreed with a mean of 4.023. There is need for organizations to consider cost and traffic flow in site selection, especially since advertising and rent can be reciprocal: A low-cost, low-traffic location means spending more on advertising to build traffic. This will ensure that the products are widely distributed and easily accessible across all markets (Majumdar, 1996).

#### 4.6.1: Extent of Influence Of Distribution

The study sought to establish to what extent accessibility of the product in the market influences the consumers choice of the product.

**Table 4.9: Extent of Influence of Distribution**

	Frequency	Percentage
Very Great Extent	29	42
Great Extent	27	39
Moderate Extent	6	9
Little Extent	5	7
No Extent At All	2	3
Total	69	100

**Source: (Research Data, 2014)**

The respondents who said that distribution influences the consumer choice to a very great extent were 42%, 39% said to a great extent, 9% said to a moderate extent, 7% said to a little extent and 3% said to no extent at all. The manufacturer and wholesaler must decide how to distribute their products since as competition become fierce, retailers and wholesalers will be wooed more assiduously and loyalty in trade will go down (Majumdar, 1996).

#### 4.7 Influence of Promotions on Consumer Behavior

The study sought to establish the extent to which the respondents agreed on the following statements on the influence of promotions on consumer behavior. The findings are shown in Table 4.10:

**Table 4.10: Influence of Promotions on Consumer Behavior**

	Mean	Std. Dev
The display of insecticide treated nets has a great influence on my choice of the brand to purchase	3.625	0.004
I purchase insecticide treated nets that I have heard advertised on Television/Radio/ Billboard	3.421	0.231
I purchase insecticide treated nets because of the advertisement run in the media	3.628	0.145
The advertisement run in the media makes me purchase a given brand of insecticide treated net.	4.022	0.662
I purchase brands that my friends have recommended	3.621	0.135
I purchase insecticide treated nets that are on sales promotional offer	3.014	0.621

**Source: (Research Data, 2014)**

On whether the display of insecticide treated nets has a great influence on my choice of the brand to purchase, the respondents agreed with a mean of 3.625. Promotion strategies play a vital role in the creation of mutually beneficial exchanges between producers and consumers of goods, services or ideas (Engel et.al. 1991). Asked whether customers purchase insecticide treated nets that they have heard advertised on Television/Radio/ Billboard, the respondents were neutral with a mean of 3.421. Asked whether consumers purchase insecticide treated nets because of the advertisement run in the media, the respondents agreed with a mean of 3.628.

On whether the advertisement run in the media makes consumers purchase a given brand of insecticide treated net, the consumers agreed with a mean of 4.022. These findings are consistent with those of Engel et. al. (1991) who cited that customers should include strategies such as advertising and direct customer interaction since good salesmanship is essential for businesses. On whether consumers purchase brands that their friends have recommended, the respondents agreed with a mean of 3.621. On whether consumers purchase insecticide treated nets that are on sales promotional offer the respondents were neutral with a mean of 3.014. Sales promotion is media or non media marketing pressure applied for a pre determined, limited period at the level of consumer, retailer or wholesalers in order to stimulate trials, increase consumer demand or improve product availability (Kotler, 2003).

#### **4.7.1 Extent of Influence of Promotions, Price, Distribution and Product**

The study sought to establish to what extent Promotions, Price, Distribution and Product. The responses are shown in the table below.

**Table 4.11: Extent of Influence of Promotions, Price, Distribution and Product**

Quality	Rank
Price	1.231
Product	1.452
Distribution	2.315
Promotion	2.513

**Source: (Research Data, 2014)**

The respondents said that price and product were great influencers to the behavior of consumers with a mean of 1.231 and 1.452 respectively. On distribution the respondents said it influenced their behavior to a moderate extent and the promotion influenced their



behavior to a little extent with a mean of 2.513. Payne (2004) points out that marketing, in this competitive marketplace, has become a key differentiator between corporate success and failure. Strategic marketing management formulation involves selecting a specific target market and making decisions regarding the crucial elements of product, price, promotion and distribution so as to satisfy the needs of customers in that market. They are designed to provide total integration of efforts that focus on achieving the marketing objectives (Ferrell et al, 2002).

#### 4.8 Multiple Regression Analysis

The researcher conducted a multiple regression analysis so as to establish the relationship between independent and dependent variables. The findings were tabulated and discussed under this section.

**Table 4.12: Model Summary**

R	R Square	Adjusted R Square	Std. Error of the Estimate
.792 <sup>a</sup>	.628	.592	4.161

a. Predictors: (Constant), Product, price, Distribution, promotion

**Source: (Research Data, 2014)**

From the model Summary above, 62.8% of the total variance in the dependent variable (consumer behaviour) can be explained by combined independent variables (Product, price, Distribution, promotion).

**Table 4.13: ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1225.625	4	306.406	26.9623	.000 <sup>b</sup>
Residual	727.312	64	11.3643		
Total	1952.936	68			

a. Dependent Variable: Consumer Behaviour

b. Predictors: (Constant), Product, price, Distribution, promotion

**Source: (Research Data, 2014)**

The ANOVA table above shows that the model fits the data as p-value is less than 0.05 (Sig. = .000). Further, the null hypothesis ( $H_0$ ) that there is no significant effect of marketing mix on consumer buying behavior of Long Lasting Insecticidal Nets (LLINs) in Nairobi County is rejected and the alternative hypothesis ( $H_1$ ) that there is significant effect of marketing mix on consumer buying behavior of Long Lasting Insecticidal Nets (LLINs) in Nairobi County is accepted instead.

**Table 4.14: Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.447	4.849		2.773	.008
Product	.329	.257	.370	1.277	.042
Price	.636	.199	.891	3.206	.002
Distribution	.569	.262	.009	2.135	.003
Promotion	.240	.110	.286	2.176	.035

a. Dependent Variable: Consumer Behaviour

**Source: (Research Data, 2014)**

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Becomes;

$$Y = 3.447 + .329X_1 + .636X_2 + .569X_3 + .240X_4$$

From the Coefficients Table 4.11, for every unit increase in consumer behavior, Product 0.329, price contributes 0.636, distribution contributes 0.569 and promotion contributes 0.240. When all other variables remain constant, consumer behavior remains at 3.447. All the contributions of the independent variables and the constant are statistically significant since p-values are all less than .05. The regression equation;

#### **4.9 Discussion of the Findings**

The findings showed that majority of the respondents agreed that the quality of insecticide treated nets is a key determinant in my purchase of a mosquito net and that packaging of the insecticide treated net influences my decision to purchase a mosquito net. Kotler and Keller (2006) cited that it is important for companies to come up with products that are of good quality and thus suite the need of the consumers The study also established that the brand name of insecticide treated nets influences the customer choice of the net they purchase. According to Atkinson & Wilson (1996), companies should provide product whose packaging contains unusually high-quality service. He also emphasized on branding of products to differentiate them from competition. The findings also showed that the majority of the respondents agreed that the value of the products was more important than the cost. On the reliability of insecticides treated nets majority agreed that it influenced their choice of the insecticide Mosquito net to buy. . The reliability of a product is one of the important dimensions that make a business successful (Azadavar, Shahbazi, & Teimouri, 2011). Majority of the respondents also agreed that the durability of the insecticide treated, the insecticide treated nets manufacturer's reputation, the popularity and the strength of the mosquito treated influenced their choice of

decision. Satya, (2011) found that it is compulsory for the firms to maintain their quality because people are more conscious of quality than price. Thus the quality of the product you produce, that will lead to a successful outcome in the long run.

On the influence of price, the study established that that majority of the respondents review the prices of insecticide treated nets before deciding on which brand to purchase and that the majority associate higher prices with high quality of insecticide treated nets. According to Majumdar (1996), companies need to include strategies that will serve specific areas in the market by offering price-quality trade off to choose their consumers. The findings also showed that the majority of the respondents use the prices to determine which insecticide treated nets to purchase and that price differentiations are key determinants of my insecticide treated nets purchase decision. Kurtulus et.al (2005) cited that most customers are price conscious. The study also established that the majority of the respondents view price of a product is a reflection of its ease of use, and status, its usefulness, its performance, its durability and its status. The findings also show that the majority of the respondents strongly agreed that there is need for pricing controls and policies on insecticides treated bed nets. Brucks, Zeithaml & Naylor (2000) concluded that consumers always examine price and brand name information differently when they are making judgments on the dimensions of quality: ease of use, usefulness, performance, durability, and status

On the influence of distribution, consumers purchase insecticide treated nets that are readily available. Majumdar (1996) cited that companies need to ensure that there is a clear distribution channel so that all the products can get to the consumers. Majority of

the respondents also agreed that they prefer to purchase insecticide treated nets which are widely distributed all over the country and well displayed. Majority of the consumers said that they purchasing insecticide treated nets that are well established on the Kenyan market. A low-cost, low-traffic location means spending more on advertising to build traffic. This will ensure that the products are widely distributed and easily accessible across all markets (Majumdar, 1996).

On the influence of promotions, majority of the respondents agreed that the display of insecticide treated nets has a great influence on my choice of the brand to purchase and that they purchase insecticide treated nets that they have heard advertised on Television/Radio/ Billboard. Promotion strategies play a vital role in the creation of mutually beneficial exchanges between producers and consumers of goods, services or ideas (Engel et.al. 1991). Majority of the respondents agreed that they purchase insecticide treated nets because of the advertisement run in the media and that the advertisement run in the media makes them purchase a given brand of insecticide treated net. Engel et. al. (1991) who cited that customers should include strategies such as advertising and direct customer interaction since good salesmanship is essential for businesses Majority of the respondents also agreed that they purchase brands that my friends have recommended and that they purchase insecticide treated nets that are on sales promotional offer. Sales promotion is media or non media marketing pressure applied for a pre determined, limited period at the level of consumer, retailer or wholesalers in order to stimulate trials, increase consumer demand or improve product availability (Kotler, 2003).

## **CHAPTER FIVE:**

### **SUMMARY, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the summary of the key data findings, discussion of the findings, conclusion drawn from the findings highlighted and recommendation made there to.

#### **5.2 Summary**

The findings showed that majority of the respondents agreed that the quality of insecticide treated nets is a key determinant in my purchase of a mosquito net and that packaging of the insecticide treated net influences my decision to purchase a mosquito net. The study also established that the brand name of insecticide treated nets influences the customer choice of the net they purchase. The findings also showed that the majority of the respondents agreed that the value of the products was more important than the cost. On the reliability of insecticides treated nets majority agreed that it influenced their choice of the insecticide Mosquito net to buy. Majority of the respondents also agreed that the durability of the insecticide treated, the insecticide treated nets manufacturer's reputation, the popularity and the strength of the mosquito treated influenced their choice of decision.

On the influence of price, the study established that that majority of the respondents review the prices of insecticide treated nets before deciding on which brand to purchase and that the majority associate higher prices with high quality of insecticide treated nets. The findings also showed that the majority of the respondents use the prices to determine

which insecticide treated nets to purchase and that price differentiations are key determinants of my insecticide treated nets purchase decision. The study also established that the majority of the respondents view price of a product is a reflection of its ease of use, , and status, its usefulness, its performance, its durability and its status. The findings also show that the majority of the respondents strongly agreed that there is need for pricing controls and policies on insecticides treated bed nets.

On the influence of distribution, consumers purchase insecticide treated nets that are readily available. Majority of the respondents also agreed that they prefer to purchase insecticide treated nets which are widely distributed all over the country and well displayed. Majority of the consumers said that they purchasing insecticide treated nets that are well established on the Kenyan market.

On the influence of promotions, majority of the respondents agreed that the display of insecticide treated nets has a great influence on my choice of the brand to purchase and that they purchase insecticide treated nets that they have heard advertised on Television/Radio/ Billboard. Majority of the respondents agreed that they purchase insecticide treated nets because of the advertisement run in the media and that the advertisement run in the media makes them purchase a given brand of insecticide treated net. Majority of the respondents also agreed that they purchase brands that my friends have recommended and that they purchase insecticide treated nets that are on sales promotional offer.

### **5.3 Conclusion**

Product influences the behaviour of consumers to a great extent. The study concludes that the quality, packaging and the brand name of the product influence the consumers' behaviour. The study also concludes that the reliability, durability and strength of the treated net influence the consumers' behaviour.

On the price, the study concludes that there is a significant relationship between the price of the net and the consumers' choice of behavior. The study concludes that consumers review the price of the net before the purchase and that they associate the high prices with the quality. The study also concludes that the price of the commodity is a reflection of its usefulness, performance, durability and status.

On distribution, the study concluded that there is a significant relationship between the distribution and the consumers' behavior. The study concludes that consumers will purchase nets that are locally available, widely distributed across the country, well displayed and those that are well established in the Kenyan market.

On promotions, the study concludes that promotions influence the consumer behavior to a great extent. The study concludes that the display of the mosquito treated net, advertisement on radios/TVs/ billboard, sales promotional offer and recommendation from friends influence the consumers' decision to purchase the nets.

### **5.4 Recommendations**

From the findings the study concluded that Product influences the behaviour of consumers to a great extent. This study therefore recommends that the various mosquito



treated nets in the country should ensure that their mosquito nets are of high quality so as to give them leverage against the consumers. The study also recommends that companies come up with new technological innovations that will lead to the making of durable materials since durability of the product influences the consumer choice to purchase the product.

On the price the study recommends that mosquito treated nets manufacturers should review their prices so as to cater for the different markets in the country. The study also recommends that companies adopt price-quality trade off strategies so as to ensure there is more sales from the high priced nets that the consumers perceive to be of higher quality.

The findings revealed that there is a significant relationship between distribution and consumer behaviour. The study therefore recommends that companies that manufacture mosquito treated nets should ensure that they have clear distribution and logistics channel that will ensure their products are widely distributed across the country. The study also recommends that companies should increase their volume of manufactured products so as to ensure consumers do not experience shortages in the market.

On promotions the study recommends that manufacturers of mosquito treated nets should carry out promotional offers for their products to their clients so as to increase their sales volume. The study also recommends that the companies take up advertising through increased television advertisements and billboards.

### **5.5 Limitations of the Study**

The study faced the following limitations.

Foremost, the study faced time constraints since the time within which the study was to be conducted was limited. However, the researcher countered this limitation by carrying out the research across the department and management level in the organization to enable a generalization of the study findings.

Secondly, the study faced a limitation posed by apprehension by respondents in the initial stage who appeared restrained to accepting to participate freely in interview geared towards data collection. In some instances the target respondents referred the researcher to other different departments who then referred you to them, a fact that took time before finally accepting to give data.

Thirdly other respondents complained of having received many requests from different researchers from different institutions and hence appeared to be in a hurry to provide data quickly so as to be through with the researcher within a short time. This kind of approach can easily compromise the findings of the study if the researcher is not diligent enough.

### **5.6 Suggestions for Further Research**

This study concentrated on the consumers within the ten major supermarkets in Nairobi. This study cannot be generalized for all consumers across the country. This study therefore recommends that in the future a study be conducted on the influence of marketing mix on consumer buying behaviour of insecticides treated nets in Kenya.

The study also recommends that in the future an evaluation be on the influence of marketing mix strategies on the performance of this firm. This study will be of importance in investigating whether adoption of marketing mix strategies influence the performance of the organization and how effective they are on improving the performance of the firm.

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The value of the products I more important than the cost					
The reliability of insecticide treated nets influence my choice of the insecticide Mosquito net to buy					
The durability of the insecticide treated nets is a key determinant of my decision on the net I purchase					
The colour variety of insecticide treated nets influences my choice of the mosquito net brand I purchase					
The strength of the insecticide treated nets influences the brand I purchase					
The popularity of insecticide treated nets influences my mosquito net purchase decision					
The insecticide treated nets manufacturer's reputation on the market influences my decision on the nets					

6. To what extent does the product brand influence your choice of purchasing?

To a very large extent [     ]

To a large extent [     ]

Moderate extent [     ]

Small extent [     ]

Not extent [     ]

### SECTION C: INFLUENCE OF PRICE ON CONSUMER BEHAVIOUR

7. Listed below are statements which are expected to influence of price on the consumer behavior of insecticide treated nets product. Kindly rate the extent to which you agree with the statements on a scale of 1-5, where 5= to very large extent, 4= large extent, 3=moderate extent, 2=small extent, 1=no extent.

	1	2	3	4	5
I review the prices of insecticide treated nets before deciding on which brand to purchase					
I associate higher prices with high quality of insecticide treated nets					
I use the prices to determine which insecticide treated nets to purchase					
Price differentiations are key determinants of my insecticide treated nets purchase decision					
The price of a product is a reflection of its ease of use, ,					

and status					
The price of a product is a reflection of its usefulness,					
The price of a product is a reflection of its performance					
The price of a product is a reflection of its durability,					
The price of a product is a reflection of its status					
There is need for pricing controls and policies on insecticides treated bed nets					
I prefer to have a price rather than technical aspects in durable goods					

8. To what extent does price affect your choice of product?

To a very large extent [     ]

To a large extent [     ]

Moderate extent [     ]

Small extent [     ]

Not extent [     ]

**SECTION D: INFLUENCE OF DISTRIBUTION ON CONSUMER BEHAVIOUR**

9. Listed below are statements that are expected to influence the shopping behavior in as far as distribution is concerned. Kindly rate the extent to which you agree with the statements on a scale of 1-5, where 5= to very large extent, 4= large extent, 3=moderate extent, 2=small extent, 1=no extent.

	1	2	3	4	5
I purchase insecticide treated nets that are readily available					
I prefer purchase insecticide treated nets which are widely distributed all over the country					
I prefer purchasing insecticide treated nets that are well displayed					
I prefer purchasing insecticide treated nets that are well established on the Kenyan market					
I prefer purchasing insecticide treated nets that					



10. To what extent does the accessibility of the product in the market influence your level of choice of the product

To a very large extent [      ]

To a large extent [      ]

Moderate extent [      ]

Small extent [      ]

Not extent [      ]

**SECTION E: INFLUENCE OF PROMOTIONS ON CONSUMER BEHAVIOUR**

11. Listed below are statements that are expected to influence consumer behavior in as far as promotion is concerned. Kindly rate the extent to which you agree with the statements on a scale of 1-5, where 5= to very large extent, 4= large extent, 3=moderate extent, 2=small extent, 1=no extent.

	1	2	3	4	5
The display of insecticide treated nets has a great influence on my choice of the brand to purchase					
I purchase insecticide treated nets that I have heard advertised on Television/Radio/ Billboard					
I purchase insecticide treated nets because of the advertisement run in the media					
The advertisement run in the media makes me purchase a given brand of insecticide treated net.					
I purchase brands that my friends have recommended					
I purchase insecticide treated nets that are on sales promotional offer					

12. Please rank the following insecticide treated nets quality in the order in which they influence your purchasing decision with 5= to very large extent, 4= large extent, 3=moderate extent, 2=small extent, 1=no extent.

Quality	Rank
Price	
Product	
Distribution	
Promotion	

## **Appendix II: List of Major Supermarkets in Nairobi, Kenya**

1. Buruburu mini-supermarket
2. Chandarana supermarket
3. Continental supermarket
4. Karen supermarket
5. Muthaiga Minimarket
6. Nakumatt Holdings Ltd
7. Tuskys supermarket
8. Ukwala supermarket
9. Uchumi supermarket
10. Naivas supermarket

**Source: Nairobi Supermarket Directory (2012)**