



**THE RELATIONSHIP BETWEEN CONSUMERS' ATTITUDE TOWARDS
PACKAGING ATTRIBUTES AND PERCEIVED FOOD QUALITY,
VALUE AND BRAND PREFERENCE
(THE CASE OF FRUIT JUICE PRODUCTS)**

**A THESIS SUBMITTED TO THE DEPARTMENT OF MANAGEMENT IN
PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTERS OF BUSINESS ADMINISTRATION (MBA)**

BY: YONATAN MAZENGLIA

ADVISOR: ATO TESHOME BEKELE

JUNE 2014

ADDIS ABABA, ETHIOPIA

ADDIS ABABA UNIVERSITY
SCHOOL OF GRADUATE STUDIES

This is to certify that the thesis prepared by Yonatan Mazengia, entitled: *The relationship between consumers' attitude towards packaging attributes and Perceived food Quality, Value and Brand Preference* and submitted in partial fulfilment of the requirements for the degree of Master of Business Administration in Management complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Approved by the Examining Committee:

Advisor

Signature

Date

Internal Examiner

External Examiner

Chair of Department or Graduate Program Coordinator

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I, the undersigned, declare that this study entitled: **The relationship between consumers' attitude towards packaging attributes and Perceived food Quality, Value and Brand Preference** is my original work and has not been presented for a degree in this or in any other university, and that all sources of materials used for the study have been duly acknowledged.

Yonatan Mazengia Teshome

Signature _____

Date _____

Confirmed By Advisor:

Name

Signature

Date

ABSTRACT

The relationship between consumers' Attitude towards Packaging Attributes and Perceived food Quality, Value and Brand Preference

Due to increasing self-service and changing consumers' lifestyle the interest in packaging as a tool of sales promotion and stimulator of impulsive buying behavior is growing increasingly. Although the increase in point-of-purchase decisions heightens the communication potential of food product packaging, empirical research on understanding whether packaging attributes create consumers' subsequent product and brand evaluations and perceptions is scant. In addition, literature analysis on question under investigation has shown that there is no agreement on classification of packaging elements. This study seeks to empirically reveal important elements of package and to examine whether attitudes towards food product packaging attributes create value perception and brand preferences through perceived product quality. A group-administered questionnaire developed from the literature was conducted, and 300 undergraduate students participated in the study. The empirical results show that graphics, color, shape, size and material are important visual elements and product information, producer, country-of-origin and brand are important verbal elements. Moreover, the empirical results show that attitude toward packaging attributes has a direct and positive relationship with consumers' perceived food product quality and brand preference, but has indirect positive relationship with food product value. Perceived food product quality also indirectly and positively related with brand preferences through product value. Based on the study findings, food firms should emphasize both visual and verbal packaging attributes to form consumers' positive perceptions and brand preference.

Keywords: *Product packaging attributes, Perceived quality, Perceived value, Brand preference*

ACKNOWLEDGEMENTS

I am grateful to God Almighty for His mercy and grace through this thesis.

I would like to express my gratitude to Graduate School of Business for incorporating thesis writing as partial requirement of completing the degree in Master of Business Administration program at Addis Ababa University. It was an enjoyable and valuable learning experience.

I am heartily thankful to my Advisor, Ato Teshome Bekele, for his precious time in reviewing as well as adding precious opinions and advice to my thesis. Special thanks are also dedicated to my colleagues and friends and family members for their encouragement and prayers. Also I am grateful to all the participants of the questionnaire who have contributed their valuable opinions for the success of the research. Thank you all.

Yonatan Mazengia

Signature _____

Date _____

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LIST OF ABBREVIATIONS

AdPd = Attitude toward packaging attributes

PPQ = Perceived food product quality

PPV = Perceived food product value

BP = Brand preference

SPSS = Statistical Package for social sciences

FBE = Faculty of Business and Economics

AAU = Addis Ababa University

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CHAPTER-ONE: INTRODUCTION

1.1 Introduction

This introductory chapter is intended to provide information concerning an overview of the study. It involves background of the study, statements of the problems and research questions of the study, objectives (general and specific objectives), significance, scope and the organization of thesis.

1.2 Background of the study

Today, constantly meeting deadlines and keeping hectic schedules leads the consumer to rely heavily on manufactured goods and processed food items. The new technologies related to productions and distributions have led to a massive proliferation in the number and type of products and brands available in the market. Ghani and Kamal, (2010) stated that packaging has become a vital means of differentiating items and attracting the consumer's attention. Certainly, there are many other factors that influence the consumer's purchase decision but product's packaging is often the first step in gaining consumer's attention and consideration before making the final decision to buy. According to Prendergast and Pitt (1996), Packaging refers to the container or wrapper that holds a product or group of products and it is important both for marketing and logistic functions. Apart from protecting the product from damage during storage and distribution, packaging becomes an important sales tool promoting the product to the ultimate consumer.

Ghani and Kamal (2010), argued that most impulse buying occurs because of product display, and attractive packaging plays an important role in product display. According to Clement (2007), point-of-purchase decisions heighten the potential for product packaging to communicate information to consumers and influence product choice. Rundh (2005) argued that Package attracts consumer's attention to particular brand, enhances its image, and influences consumer's perceptions about product. Furthermore package imparts unique value to products (Underwood, Klein & Burke, 2001; Silayoi & Speece, 2004), works as a tool for differentiation, i.e. helps consumers to choose the product from wide range of similar products, stimulates customers buying behavior (Wells, Farley & Armstrong, 2007).

Packaged food is an indispensable component in the modern lifestyle due to the greater demand for convenient, portable, easy-to-prepare meal solutions that lessen the hassles of grocery shopping and preparing a meal. However, various local food products (such as cookies, popcorn, Kollo etc.) in Ethiopia lack adequate packaging (though sufficient statistical evidence could not be presented). In such situation, innovation in packaging becomes a fundamental strategy for competitive success and survival within a competitive global market. An innovative packaging design can change product perception and create a new market position (Rundh, 2005). A good packaging design is regarded as an essential part of successful business practice. The reason many companies invest massive amount of money on packaging is because they are well aware that a stunning packaging will draw consumer's attention and is capable of turning the buyer on or off.

Over recent years, consumers are getting more health-conscious; a greater awareness of healthy eating lifestyle is changing the shopping habits of consumers and they are now paying more

attention to read the nutrition labels and seeking out products with health benefits. In this regard, the government of Ethiopia imposed legislative pressure that affect packaging which is related to labeling whereby the manufacturer or packer is required to declare the nutritional facts, added ingredients, and best-before date criteria on the packaged food to ensure that information on the packaging is sufficient to facilitate the consumers in making purchase decision (Regulation No. 299/2013). Therefore, to ensure success, marketers must not only optimize the visibility of the packaging but also ensure that the packaging is able to communicate the specific benefits of the product and facilitate the consumers in product selection within a variety of brands available in the market.

Given the consumer and legislative pressure on companies to rethink their approach to packaging, identifying the important packaging attributes in the packaged food market, particularly from the consumer's perspective is important.

1.3 Statement of the problem

Package attracts consumer's attention to particular brand, enhances its image, and influences consumer's perceptions about product (Rundh, 2005). Moreover, package imparts unique value to products, works as a tool for differentiation, i.e. helps consumers to choose the product from wide range of similar products, stimulates customers buying behavior (Underwood, Klein & Burke, 2001; Silayoi & Speece, 2004). Mohd et al. (2010); and Mallinckrodt & Mizerski (2007) have concluded that perceived value has significantly influenced the purchasing intention of food products and that consumer brand preferences guide their future behaviors.

Although the increase in point-of-purchase decisions heightens the communication potential of food product packaging, empirical research on understanding whether packaging attributes create consumers' subsequent product and brand evaluations and perceptions is scant (Edward et al., 2013). In addition, studies has shown that there is no agreement on classification of package attributes. Some of researchers try to investigate all possible elements of package and their impact on consumer's purchase decision (Silayoi & Speece, 2004; Silayoi & Speece, 2007; Butkeviciene, Stravinskiene & Rutelione, 2008), while others concentrate on separate elements of package and their influence on consumers buying behavior (e.g., Vila & Ampuero, 2006; Madden, Hewett & Roth, 2000; Underwood et al., 2001; Bloch, 1995). Moreover some researchers investigate impact of package and its elements on consumer's overall purchase decision (e.g., Underwood et al., 2001), while others – on every stage of consumer's decision making process (e.g., Butkeviciene et al., 2008).

Because the abundance of scientific literature on this issue do not provide unanimous answer concerning package elements as well as whether packaging attributes generates consumers' subsequent product and brand evaluations and perceptions, exploring important packaging elements and the relationship between consumers' attitude towards packaging attributes and product/brand perceptions can provide insights for food firms to enhance consumer-perceived product value and brand preference towards their products using packaging attributes.

This study therefore, seeks to empirically reveal important elements of packaging and to examine whether consumers' attitude towards packaging attributes generates value perception and brand preferences through perceived product quality in the case of fruit juice products.

1.4 Research Questions

1. What are the important elements of fruit juice products packaging?
2. Which of the package elements depend upon the effect of time pressure, level of involvement and consumer's individual characteristics?
3. Is there statistically significant relationship between attitude toward packaging attribute and brand preference?
4. Is there statistically significant relationship between attitude toward packaging attribute and perceived food quality?
5. Is there statistically significant relationship between perceived food quality and perceived food value?

6. Is there statistically significant relationship between perceived food quality and brand preference?
7. Is there statistically significant relationship between perceived food value and brand preference?

1.5 Objectives of the study

1.5.1 General objective

Agreement concerning packaging attributes as well as understanding the relationship between attitudes toward packaging attributes and consumer's product preference is important. The purpose of this study is: to empirically reveal important elements of packaging and to examine the relationship between consumers' attitude toward packaging attribute and perceived quality, perceived value and brand preference.

1.5.2 Specific objectives

1. To identify the important elements of product packaging.
2. To investigate the influence of time pressure, involvement level and individual characteristics on the importance of package elements.
3. To examine the relationship between attitude toward packaging attributes and brand preference.
4. To examine the relationship between attitude toward packaging attributes and perceived food quality.

5. To examine the relationship between perceived food quality and perceived food value.
6. To examine the relationship between perceived food quality and brand preference.
7. To examine the relationship between perceived food value and brand preference.

1.6 Research Hypothesis

1. There is no significant relationship between attitude toward packaging attributes and brand preference.
2. There is no significant relationship between attitude toward packaging attributes and perceived food quality.
3. There is no significant relationship between perceived food quality and perceived food value.
4. There is no significant relationship between perceived food quality and brand preference.
5. There is no significant relationship between perceived food value and brand preference.

1.7 Significance of the study

To achieve the communication goals effectively and to optimize the potential of the packaging in a buying place, marketers must recognize important attributes of a packaging and their relationship with consumer's brand preference so as to integrate these perceptual attributes into their packaging design. This study is significant since majority of the previous packaging studies were not locally-based (Silayoi and Speece, 2004; 2007; Kuvykaite et al., 2009; Edward, 2013),

and so ought not to be expected to reflect the same situation settings as in Ethiopia. Thus, the results of this study will provide a new insight to the local marketers towards important packaging attributes and offers directions for understanding their relationship with consumers' product and brand evaluation.

1.8 Scope of the study

Certain research delimitations should be considered when applying the results of this study. First, the research design used packed fruit juice products because of their popularity by students at FBE campus of Addis Ababa University. Although the findings may be replicated for other food products, future research must clarify this important validation. Second, although the present study matched the survey setting to fit test population by selecting a product that was popular by students, the author is cautious about generalizing these findings to the overall population. The research was performed in 2014 in Addis Ababa.

1.9 Limitation of the study

There were possible barriers that hindered the study from getting complete data. First, since the study used convenience sampling from student population, including different group of consumers were difficult; for example households, peoples with different lifestyle etc., were not included in the study. In addition, 7% of questionnaires distributed were returned incomplete/invalid.

CHAPTER-TWO: LITERATURE REVIEW

2.1 Introduction

In this chapter, the relevant literature on packaging attributes as well as the relationship between consumer's attitude toward packaging attributes and perceived product quality, perceived product value and brand preference is reviewed and the theoretical framework showing the relationships between these variables is presented.

2.2 Packaging

Different researchers emphasized different functions of packaging and some of their studies related either to logistic or marketing functions (Prendergast and Pitt, 1996). For logistics, according to Prendergast and Pitt (1996) the packaging allows the product to be contained, apportioned, unitized and communicated.

Hellström and Nilsson (2011) stated that packaging is not only a means of logistically ensuring safe and efficient delivery to the consumer at minimum cost, but is also one of the most important marketing tools for communicating the brand message to the consumer. From a marketing perspective, product packaging is an extrinsic cue (Chung et al., 2006), and consumers are first exposed to the product packaging, and then experience the product (Orth and Marchi, 2007). Product packaging is therefore a means for the manufacturer to communicate subliminally with the consumer (Thalhammer, 2007) for product evaluation (Chung et al., 2006), brand differentiation and identity, and consumer brand influence (Underwood, 2003). Because product packaging reaches most buyers at the crucial purchase-decision moment (Ampuero and Vila,

2006), researchers have further suggested that product packaging is one marketing communication tool that continues to grow in importance (Wells et al., 2007; Insch and Florek, 2009) by clearly indicating that there is a strong association regarding packaging and brand preference, with over 73% of consumers interviewed stating that they rely on packaging to aid their decision-making process at the point of purchase.

Packaged food is an indispensable component in the modern lifestyle due to the greater demand for convenient, portable, easy-to-prepare meal solutions that lessen the hassles of grocery shopping and preparing a meal. According to Matsatsinis et al. (2007), market competition forces food firms to continually market their products to obtain the largest market share. In such situation, innovation in packaging becomes a fundamental strategy for competitive success and survival within a competitive global market. Rundh (2005) clearly indicated that an innovative packaging design can change product perception and create a new market position. A good packaging design is regarded as an essential part of successful business practice. The reason many companies invest massive amount of money on packaging is because they are well aware that a stunning packaging will draw consumer's attention and is capable of turning the buyer on or off.

Over recent years, consumers are getting more health-conscious; a greater awareness of healthy eating lifestyle is changing the shopping habits of consumers and they are now paying more attention to read the nutrition labels and seeking out products with health benefits. In this regard, the government of Ethiopia imposed legislative pressure that affect packaging which is related to labeling whereby the manufacturer or packer is required to declare the nutritional facts, added ingredients, and best-before date criteria on the packaged food to ensure the information on the

packaging is sufficient to facilitate the consumers in making purchase decision (Regulation No. 299/2013). However, in Ethiopia, we can see various local food products (such as cookies, popcorn, kollo etc.) in different supermarkets and shops lack adequate visual and verbal attributes of packaging (though sufficient statistical evidence could not be presented).

Nonetheless, to ensure success, marketers must not only optimize the visibility of the packaging but also ensure that the packaging is able to communicate the specific benefits of the product and facilitate the consumers in product selection within a variety of brands available in the market. Given the consumer and legislative pressure on companies to rethink their approach to packaging. Therefore, it could be surprising to learn about packaging attribute from the consumers' perspective.

2.2.1 Packaging elements towards product

Rundh, 2005 concluded that the actual package can be considered as a part of the product since it can assist a product's benefits and be important for the product usage. According to kuyvkaite (2009), for different products, the shape of the package is the crucial factor for success in the marketplace, whereas size and color can be vital for other goods. Graphics and material technology image are the other elements that also contribute to a successful package. Since the packaging is the last marketing communication tool the company uses before the purchase decision is made, the importance of package is highlighted in the communication mix of a company.

The combination of shape creativity and color together with well-designed graphics forms the package and creates consumer emotional appeal. Here, the logistics and marketing aspects are

considered and performed in cost efficient way. A company's stability and profitability are dependent on its product relevance and business performance.

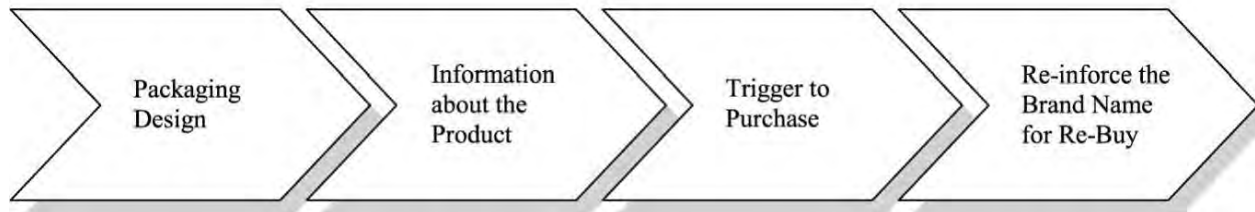


Figure 2.1. *Packaging design and trigger to purchase (Rundh, 2005)*

In Figure 2 the process of the package influence on the product consumption is presented. The first thing that evokes consumer attention is product design. By examining the visual elements, a consumer investigates the content and information about the actual product. The package, covered by different design elements, may evoke the desire to purchase the product. When the purchasing decision is made and the product is bought, the product strength and demand is established.

2.2.2 Packaging as a quality measurement

According to Holmes et al. (2012), the quality of the package as well as the quality of the actual product are the core elements of purchasing decision making. When the consumer forms an opinion towards the new package, the packaging design variables are highly important. The consumer makes a quality evaluation based on the packaging attributes and the overall package. Here, the consumer may perceive the usefulness of the package and judge the favorability of the new product. Packaging is a quality measurement for the products. According to Holmes et al., (2012), when the consumers view the new package on the shelf, they are usually forced to make a quality evaluation of the product through experience with the package.

Quality judgments are influenced by product and package characteristics. When the package communicates high quality, frequently the consumer assumes the product itself as a high quality item. If the package gives the impression of low quality, the consumer perceives the actual product as a low quality item. Underwood, Klein and Burke (2001) suggested that consumers instinctively can imagine how the product looks, tastes, feels, smells, and sounds while viewing pictures and images on the package.

Silayoi et al. (2007) suggested that packages should be exciting and safe and have a high quality at the same time. Food product expectations are created by packaging elements such as labeling and product information. Here, the color element also plays an important role. Colors on the package can be perceived and associated with quality attributes, such as flavor and nutrition. Previous studies also suggested that a positive effect can be gained by combination of packaging elements: color, clear packages and incident light. In food service, the food products chosen for display are selected for their color and appearance attributes (Edward et al., 2013).

Holmes et al. (2012) suggested that the quality combined with product price can influence the purchase intention. Studies suggested that the price of lower-priced packaged goods receives less attention than high-priced goods. Previous studies suggest that the attitude towards the package and expected product quality has influence on the consumer's purpose to buy a low-priced packaged product/brand in the supermarket (Holmes et al., 2012).

2.2.3 Packaging design as a tangible object

According to Ampuero et al. (2006), the package design contains visual and sensual attributes which communicate to the consumer. Visual elements relate more to the perception and attractiveness, whereas sensual refer to the physical sensation. The way how the consumer interacts with the object, its surface and material can influence the evaluation of product content and quality. Hence, the designing of the package as a physical object is very important as is the creation of attractive visual elements.

Previous studies argued that from a physical point of view, a package is a container that directly contacts the product, protects, preserves and identifies it. Ampuero et al. (2006) had identified three types of packaging. First, prime package is in direct contact with the product. Secondary packaging consists of one or more primary packages and has the role of protection, identification and communication tools. Tertiary packaging consists of two previous packages and its function. The task of the third type of package is to distribute, unify and protect products throughout the commercial chain.

Good package design requires knowledge of materials, their properties, manufacturing methods and conversion process (Sehrawet et al., 2007). The materials that can be used for producing packages are wood, paper and board, plastics, glass, metals, and textiles. Here, the choice of material depends on the nature of the product, production process, and equipment. The product shelf life, storage and transit requirements also have an impact on the material choice.

The vast variety of products and goods implies a large amount of different packaging methods. Here, as in the case of the materials, the method of packaging is strongly dependent on the actual

product. For instance, wrapping is the method of packaging in which an object is enveloped in a sheet of material. The product which can be wrapped does not suit to the products which are in a liquid or unstable condition. Plastic or glass bottles and jars are used as a package for beverages. Steel canning package is a method of preserving perishable food. Hence, the package varies from the product categories as well as from the materials and technical methods it requires.

At the start of every design project, marketers and designers need to have knowledge of the material categories, limitations and possibilities for a particular type of a package, and its conditions and requirements. When the sensual part of the package is well designed and made in a proper way, it is easier to include visual elements with appropriate and selected information and a message which will attract the consumer and evoke an interest in the product (Ampuero et al., 2006). In this study, “attitudes towards visual packaging design” refers to the consumers’ feeling of favorability towards the packaging attributes or features, including the specific choice of visual (graphics, color, shape, size and material) and verbal (product information, producer, country-of-origin and brand name) elements.

2.3 Theoretical framework of the study

2.3.1 Packaging and its Attributes

There are many different schemes for the classification of packaging attributes shown in the previous research (Kuvykaite et al., 2009). According to Smith and Taylor (2004), the six attributes that must be taken into consideration by marketers in creating effective packaging include graphics, color, size, form, material and flavor. Whereas Rettie and Brewer (2000) divided packaging attributes into verbal (brand slogans) and visual (visual appeal and picture) attributes.

However, according to Silayoi and Speece (2007), there are four main packaging attributes that can potentially affect consumer purchase decisions, which can be separated into two categories: visual and informational attributes. The visual attributes are graphics and size or shape of packaging, and relate more to the affective side of decision-making. Informational attributes relate to information provided and technologies used in the package, and are more likely to address the cognitive side of decision-making.

Rita Kuyvkaite (2009) classified package elements as visual and verbal: graphics, color, shape, size and material of package can be included in visual attributes and product information, producer, country-of-origin and brand as verbal attributes.

Relying on literature analyzed, this study supports the later argument and summarized two main blocks of package elements: visual and verbal elements i.e. graphic, color, size, form, and material are considered as visual elements, while product information, producer, country-of-origin and brand are considered as verbal ones.

Food packaging visual stimuli form consumer attentions and their product perceptions (Venter et al., 2011), and plays a decisive role in the food product market (Brommer et al., 2011). On the other hand, informational elements are becoming increasingly important and influence choice. Consumers tend to judge food product performance by reading the label if they were considering products more carefully. Appropriately delivered information on packaging generates strong impact on the consumers' purchase decision. This information reduces the uncertainty and creates product credibility (Silayoi & Speece, 2004).

Visual Attributes – Graphics

Silayoi and Speece (2004) stated that, to a great extent, the aspects relating to the graphics of the packaging influence the choice of product. A vivid picture on the packaging generates consumer attention by breaking through the competitive clutter (Silayoi & Speece, 2004). It is said that a picture is worth a thousand words. According to Underwood, Klein, and Burke (2001), consumers were prone to imagine the tastes, feels, or smells of a product while they were looking at the graphic on the packaging. Over 43% of consumers claim to use the pack photography as an indication of product quality (Wells et al., 2007). The results from Vila and Ampuero (2006) give rise to the conclusion that with respect to packaging images, safe guaranteed products and upper class products are associated with pictures showing the product. Therefore, a graphic attribute that attracts consumers at the point of sale will help them make choice for the product/brand quickly. According to Prendergast and Pitt, 1996, consumers would become frustrated without the many clues provided by the graphics of sales packaging.

Visual Attributes – Color

Garber, 1995 suggested that the selection of the colors and color combinations is a necessary process for creating a good design package. Color is a key element of design due to the fact that it is usually vivid and memorable. The package color can have a significant effect on consumers' ability to recognize the product, the meaning conveyed by the package, its novelty and contrast to other brands and company's names. According to Garber et al. (2000), the package color can be modified without changing the costs, product characteristics and functionality.

According to Sehwret et al. (2007), packaging applications have many color-coded messages which are associated with the particular product category. Previous studies suggested that in case of food package, color can influence product expectations and perceptions (e.g. taste) (Kauppinen-Räsänen & Luomala, 2012).

According to Kauppinen-Räsänen et al. (2012), product packages in similar colors may attract attention by means of brand or product category. Dissimilar or novel colors may attract and be preferred by those customers who like novelty. The right choice of colors is an important factor in creating the impression needed to influence brand and product selection. Therefore, understanding consumer views on how the color attribute plays a role in their brand preference is critical for food companies.

Visual Attributes – Shape

A consumer interacts with these two elements in order to make volume judgments, e.g. consumers perceive more elongated packages to be larger (Silayoi & Speece, 2004). According to Silayoi & Speece (2004), a unique shape can be a very powerful weapon in differentiating a

brand. Innovation in packaging shape could help to make products more appealing and distinguish them from their competitors. Changing the shape of product packaging can play an important role in product differentiation and bring in significant profits at the sales register. An unusual container more successfully competes for the viewer's attention than the norm.

According to Silayoi and Speece (2004), distinctive packaging shapes are considered more attractive for children's products. It has been reported that children preferred to try products in different packaging shapes. The packaging shape can be a key element of a package that contributes to the emotional experience. The effect of package shape has a strong influence on the purchasing choice when the quality of the product is hard to determine. Therefore, the elongated shape causes the consumer to think of the package as having better product volume and cost efficiency (Silayoi & Speece, 2004). As packaging shape has been found to be positively significant in predicting brand preference, previous studies also suggested that the shape of the packaging is an essential factor for success in the marketplace for various products.

Visual Attributes – Size

Packaging size is one of the main visual attributes when making a purchase decision (Kuvykaite et al., 2009). The packaging size is related to usability, as consumers appear to use this visual criterion as a heuristic that helps to make volume judgments (Silayoi & Speece, 2004). Consumers use the height of the container or its elongation to simplify volume judgments. Silayoi & Speece (2004) suggested that a bigger package reflects better value but consumers from smaller households are not interested in larger packages; whereas the larger packaging size is more easily noticed and communicates higher value according to. Previous researches has

shown that many products need to be sold in different package sizes due to the market demand for flexibility (Rundh, 2005).

Visual Attributes – Packaging Material

According to Kuvykaite et al. (2009); Silayoi & Speece (2004), (2007), packaging material is one of the main visual attributes when making a purchase decision. Research indicates that consumers expect all packaging to be environmentally friendly (Prendergast & Pitt, 1996). Consumers demand more environmentally friendly packaging or packaging that is recycled and reused more easily (Rundh, 2005). In addition, some housewives have indicated that food packages need to be made with nontoxic materials (Silayoi & Speece, 2004, 2007). In terms of convenience, customers demand packaging that offers easy shop-ability, open-ability, reclose-ability, portability and disposability. Rundh (2005) also stated that combinations of different materials can encourage people to touch the package and thereby be inspired to try the actual product/brand.

Verbal Attributes – Informational elements

According to Silayoi & Speece (2004), (2007); Kuvykaite et al. (2009), packaging as the primary vehicle for communication with the consumer provides details about the product at the point of sales including the nutritional value, added ingredients, country of origin, the producer and best before date. Informational elements of the package play a vital role in decision-making. Silayoi & Speece (2004) also suggested that appropriately delivered information on the packaging has a strong impact on consumer purchase decisions, as this information reduces uncertainty and creates product credibility.

Dransfield et al. (1998) stated that consumers are becoming more careful shoppers, and have been found to be paying more attention to label information as well as using the packaging information more extensively, as they are more health and nutrition conscious. The packaging may be the only communication between a product and the consumer in the store (Honea, H. and Horsky, S., 2012) and is the critical factor in consumer purchase decisions (Butkeviciene, Stravinskiene, & Rutelione, 2008). The previous literature has found that the producer and country-of-origin were one of the pieces of information on the package that had a significant influence on consumer's brand preference (Matsatsinis et al., 2007; Kuvykaite et al., 2009; Mensonen, 2012). Previous studies also suggested that brand name on the package label is a vehicle for brand identity and differentiation thus stimulates quality perception and product/brand preference; a brand which is best known in a product category will be selected over those that are not (Kuvykaite et al., 2009).

2.3.2 Importance of package elements depending on Consumer's involvement level, time pressure and individual characteristics

According to the literature analyzed (Silayoi & Speece, 2004, Grossman & Wisenblit, 1999, Butkeviciene et al., 2008 and Edward S.T Wang, 2013) the influence of packaging attributes on consumers brand preference can be stronger or weaker depending on the consumer's involvement level, time pressure or individual characteristics of consumers.

The importance of consumer's involvement level for choice of products was confirmed by (Maiksteniene & Auruskeviciene, 2008) in their recent research. On the other hand, food and others FMCG usually are treated as low involvement products (Grossman & Wisenblit, 1999),

however Silayoi & Speece (2004, p.611) referring to other researchers pointed out that some consumers may view food shopping not as a low involvement action. In addition Rita Kuyvkaite (2009) In addition, Rita Kuyvkaite (2009) argued that consideration should be taken on the pattern of consumers changing behavior due to increasing role of ecology, rising interest in a healthy lifestyle and he confirmed that visual elements of package have stronger effect on consumers when they are in the level of “low involvement”, in contrast to those who are in “high involvement” level. Conversely, verbal elements of package have stronger effect on those consumers who are in the level of “high involvement”. In the latter situation consumer show more interest in product and its package, taking into consideration information about product, expressing loyalty to a particular brand, etc. Thus, this study maintain that consumers’ involvement in purchasing food products (packed fruit juices) can vary from low to high level, depending on particular consumer.

Also with reference to the results of the researches of Silayoi & Speece (2004), Butkeviciene et al. (2008) it was assumed that time pressure is another important factor which influence the impact of visual and verbal package elements on consumer’s purchase decision. According to the results of previous researches it was assumed that visual elements of package have stronger influence on product selection when consumers are under time pressure and, conversely, when consumers are not under time pressure, verbal elements of package have stronger influence.

Besides, Bloch (1995), Silayoi & Speece (2007) proposed that package influences consumer’s buying behavior depending on his /her individual characteristics. The role of gender and age for the wine buying decision was investigated by Barber, Almanza & Donovan (2006). Therefore, in this study gender and age will be considered as individual characteristics of participants in order

to see whether there is any association between these two variables and package elements of fruit juice package.

2.3.3 Attitudes toward packaging attributes and brand preference

Brand preference refers to the tendency to select a specific product brand over a similar product brand. Among the many factors that influence consumer purchase decisions, product packaging has become a vital means for differentiating items and attracting consumer attention and encouraging them to purchase a particular brand/product (Olga & Natalia, 2006; Vidales, 1995). Therefore, packaging design has therefore been used as a strategic tool for differentiation and brand equity development (Vazquez et al., 2003). Today, the advancement and technological development in the production and distribution of food products have led to a massive proliferation in the number and brands of food products available on the market. This may increase brand parity within a product category, meaning that when brands become similar and difficult to differentiate, consumers may face difficulty in selecting which brand to purchase. Food businesses employ packaging to inform, persuade, and remind consumers that their respective products are better than those of other brands. Positive imagery-processing elicited by packaging design as well as appropriately delivered information on packaging exert great importance on brand preference (Edward et al., 2013; Dransfield et al., 1998; Dimra and Skuras, 2003).

2.3.4 Attitudes toward packaging attributes and perceived quality

Product quality was an important attribute for consumers when discussing consumer retailing (Noad and Rogers, 2008). Consumer-perceived product quality is the consumer judgment of the overall excellence or superiority of a product (Anselmsson et al., 2007). In the study, perceived

food product quality referred to the customer assessment of the guarantee or superiority of the food product under consideration. Previous research has suggested that consumer attitudes are formed by learning and influenced by personal experience and marketing stimuli (Wang and Heitmeyer, 2006). Additionally, product packages consist of an array of cues (Kabir Chowdhury and Andaleeb, 2007) that serve as surrogate indicators of product quality (Ampuero and Vila, 2006; Inch and Florek, 2009). According to Sehwret and Kundu (2007), consumers are likely to form product benefit perceptions when exposed to or evaluating visual and verbal packaging attributes. Holmes et al. (2012) also stated that most consumers in food market perceived package attributes as an indication of product quality.

2.3.5 Perceived quality and perceived value

According to Golob and Podnar (2007), perceived quality provides added value for the consumer. Perceived product value is the outcome of the subjective consumer judgment of product benefits (Huber et al., 2007). In this study, perceived food product value referred to the customer assessment of price acceptability, the food product's ability to meet expectation, and worth of the food product under consideration. Previous studies have suggested a positive association between perceived quality and perceived value (e.g. Edward et al., 2013).

2.3.6 Perceived quality and perceived value

Chomvilailuk and Butcher (2010) suggested that brand preference is the relative preference for choosing, buying and using a specific brand over other brands. According to Metcalf et al. (2012), product quality perception is of prime importance in most purchasing transactions, and the effects of perceived quality on brand evaluation have been well documented. Previous research has suggested that brand preference increases as the perceived product quality

importance increases (Chomvilailuk and Butcher, 2010). Thus, product quality is potentially an important factor that influences brand preference perception (Ahmed, 2011).

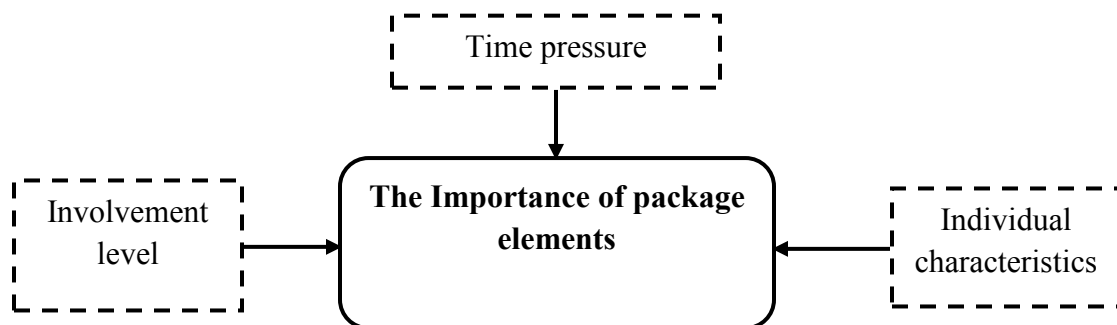
2.3.7 Perceived quality and perceived value

Prior marketing studies have suggested a direct positive relationship between perceived value and brand preference (Chiu et al., 2010), and indicated that the main factor influencing brand preference is perceived value (Hellier et al., 2003). These studies have established that overall consumer perceptions of product value are strongly associated with brand preferences.

2.4 Conceptual framework

The performed literature analysis let this study maintain that package could be treated as a set of various elements communicating different messages to a consumer. The type of message communicated depends on those elements. Visual elements of package transmit information which affects consumer's emotions, whereas verbal elements transmit information which has an effect on consumer's cognitive orientation (Silayoi & Speece, 2004). According to the literature analysis of Rita Kuyvkaite (2009), the importance of package elements could be affected by time pressure, involvement level and individual characteristics of consumers. *Figure 1A* shows this effect.

Figure 2.2A. *Conceptual framework of the effect of time pressure, involvement level and individual characteristics on the importance of package elements*

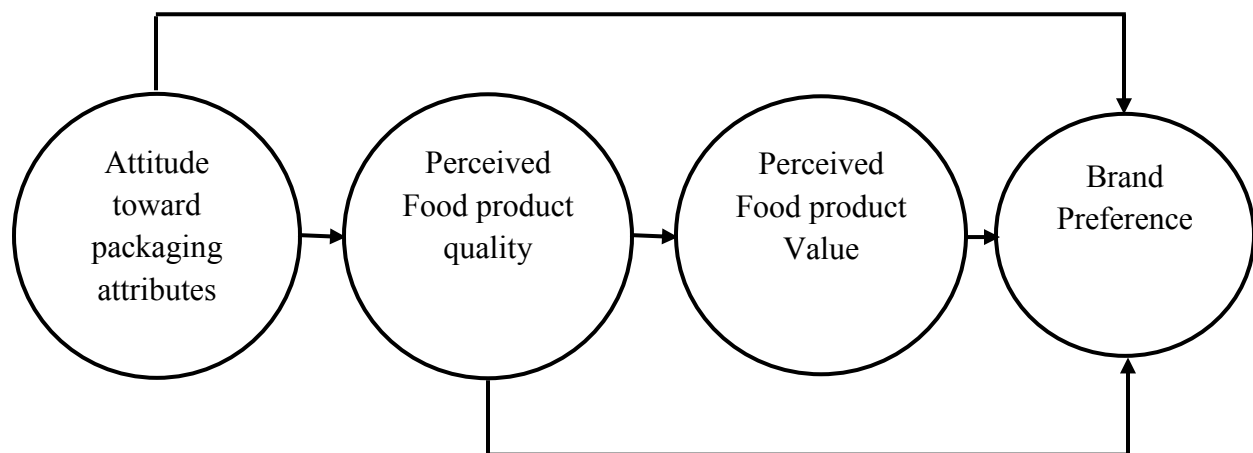


Source: *Literature review and theoretical framework (adopted from Rita Kuyvkaite, 2009)*

Edward (2013) developed a research model showing the relationship between visual packaging design (colors, typeface, logos, size, and graphics) and perceived quality, value and brand preference. This work extends current research to show the relationship between both visual and verbal packaging attributes and perceived product quality and brand preference. In the following model attitude toward package attributes indicate both visual and verbal elements i.e., graphic,

color, shape, size and material are considered as main visual elements, whereas product information, producer, country-of-origin and brand are treated as the main verbal elements of package.

Figure 2.2B. *Conceptual framework of the relationship between attitudes toward packaging attributes, perceived quality, value and brand preference.*



Source: *Literature review and theoretical framework (Edward et al., 2013)*

In conclusion, this chapter presented effect of time pressure, involvement level and individual characteristics on importance of packaging elements. This chapter also presented a review of related literature that focused on the relationship between attitude toward packaging and perceived quality, value and brand preference. A conceptual framework was developed based on the literature review and theoretical study. The following chapter describes the research design, procedures and methodology used for data collection and analysis of the study.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, for the research to be systematic, logical, empirical and replicable, the practical methods used in order to answer the research questions and fulfill the purpose of the research are presented. Also it provides an overview of the research design, a description of the instrument used for data gathering, the target population, sampling procedure and unit of analysis, sources of data used and methods of data analysis, presentation and interpretation.

3.2 Research Approach

To achieve the aforementioned objectives, the study adopts a quantitative research approach. Quantitative method is a study involving analysis of data and information that are descriptive in nature and qualified (Sekaran, 2001). A quantitative approach was used because this study primarily uses postpositive claims for developing knowledge. According to Bhattacharjee (2012), postpositive claims take a position that one can make reasonable inferences about a phenomenon by combining empirical observations with logical reasoning and employs strategies such as surveys, and collected data on predetermined instruments that yield statistics data.

3.3 Research design

Taking into account the research problem, aim of this paper and the requirements for information needed, descriptive and correlational research in order to reveal the important elements of package and to show the relationship between attitude toward package attribute and perceived quality, value and brand preference.

For this study, survey research method has chosen where the questionnaire used to collect the information. This study employed a structured survey i.e., used formal lists of questions asked of all respondents in the same way. The reliability of a survey results depends on whether the sample of people from which the information has been collected is free from bias and sufficiently large. According to Leary (2004), the major advantages of questionnaires are that they can be administered to groups of people simultaneously, and they are less costly and less time-consuming than other measuring instruments.

Fruit juice packaging was used by the author as the food product packaging for the study. Fruit juice was chosen for this study because it was relatively popular with the students. Convenience sampling, a type of Non-probability sampling method was chosen participating students that are readily available because supermarket customers have limited time and unable to fill questionnaires. The total population of both regular and extension business students at FBE campus in AAU are 3,495. Thus, based on the method developed by Carvalho (1984); in total, 300 students, selected from various levels and business classes at FBE campus in Addis Ababa University, participated in this study. A group-administered questionnaire developed from the literature was conducted and analysis was made based on results computed using statistical data tool/software SPSS V. 21.0.

3.4 Population, Sample, and Participants

The target population for the study consists of various levels and classes of FBE campus business school students at Addis Ababa University and the total population size is 3,495 regular and extension students. Sample determination used for this study was based on the method

developed by Carvalho (1984). The total sample size was comprised of 300 students participated from various levels and classes, this is because business class students are more familiar with the topic and better understand and respond to questions. A convenience sampling technique was used, which was according to Leary (2004) refers to a sample of participants that are readily available.

Table 3.1. Sample size determination

Population Size	Small	Medium	Large
51-90	5	13	20
91-150	8	20	32
151-280	13	32	50
281-500	20	50	80
501-1200	32	80	125
1201-3200	50	125	200
3021-10,000	80	200	315
1001-35,000	125	315	500
35001-150,000	200	500	800

Source: Carvalho (1984)

3.5 Data Type and measurement Scale

There are two main sources/procedures to collect relevant data, primary and secondary data. Since the research aim is to measure respondent attitudes or opinions, this study used primary data for analysis purpose. All the variables in this study have been measured in nominal and ordinal scale.

3.6 Data Collection instruments

Primary data were collected from the participants using a survey questionnaire. Sekaran (2001) suggests that questionnaires are an efficient data collection mechanism provided the researcher knows exactly what is required and how to measure the variables of interest. In this study, a group-administered questionnaire developed from the literature was conducted.

The Questionnaire distributed have two sections: in section one, the study participants were asked to report their attitudes towards the important product packaging features by ticking in the boxes provided; in section two, the current work collected research construct measures from existing literature, and employed a 5-point Likert-scale anchored by a strongly agree/strongly disagree combination. The work by Underwood (2003) modified by the author for measuring attitudes towards packaging attributes and visual and verbal element assessment (e.g. graphics, colors, shape, size, material, product info, producer, country-of-origin and brand). Perceived product quality and perceived product value were measured by the author using three and four separate items, respectively. Three items taken directly from Edward et al. (2013) measured brand preference. The survey questionnaire was distributed in English language.

3.7 Unit of Analysis and Time dimension

Literature analysis on packaging revealed that the most common assessment of packaging attributes is the individual attitudes (Underwood, 2003; Silayoi & Speece et al., 2007). Thus, to understand the consumer attitudes toward package attributes, and to influence it in a given direction, it is necessary for marketers to understand the opinions and the basic attitudes underlying them. For the purpose of this study, the unit of analysis was individuals. A survey

study was performed in the year 2013/2014 in Addis Ababa University in order to complete the questionnaire.

3.8 Data Analysis Method

Once data is collected, it is necessary to employ statistical techniques to analyze the information, as this study is quantitative in nature. Data were analyzed based on results computed using SPSS V. 21. Descriptive statistics such as frequencies and chi-square test were used for section one responses. For section two responses, spearman's correlation was used to ascertain the relationship between attitude toward packaging attributes and perceived quality, value and brand preference.

3.9 Variable and measurement

A four page questionnaire which is divided into two sections includes; section-one and section-two were developed. All sections of the questionnaires are developed in English language.

Section-one: In order to reach the purpose of empirical research – to determine the importance of various elements of fruit juice packages – two questions require information about demographic data of respondents (age and gender) and two questions about their opinions toward important package elements under time pressure and in normal condition, and one question about their level of involvement. The responses were interpreted using frequency tables and graphs. In addition, chi square test were conducted to show associations between variables.

Section-two: Questions pertaining to the relationship between packaging attributes and brand preference:- The study participants were asked to report their attitudes towards the product

packaging features, perceived quality, value and brand preference. Generally the section consisted of 19 questions as shown in the Table-2 below.

Table 3.2. *The components of questions related to attitude toward packaging*

S. No.	Dimensions	Total questions
1.	Attitude toward packaging attributes	9
2.	Perceived food product quality	3
3.	Perceived food product value	4
4.	Brand preference	3
	Total	19

Source: *Research Questionnaire, 2014*

In order to answer the questions, respondents have to select their choice of agreement based on 5-point Likert scale according to their opinion on each item. Each answer has been given a score and it is assumed that the format is easier for the respondents to understand the concepts and provide precise answers.

3.9.1 Validity of the Questionnaires

In order to measure the attribute of interest, and for the instrument to be predictable, consistent, and accurate, this study tried to address four types of validity: Internal validity, External validity, construct validity, and Statistical conclusion validity.

Internal Validity: Since this study used field survey method, it is poor in internal validity because of its inability to manipulate the independent variable and because cause and effect are measured at the time.

External Validity: In this survey research, where data is sourced from a wide variety of individuals, tends to have broader generalizability than laboratory experiments where artificially contrived treatments and strong control over extraneous variables render the findings less generalizable to real-life settings where treatments and extraneous variables cannot be controlled.

Construct Validity: The researcher tried to address the construct validity through the review of literature and adapting instruments used in previous researches. Moreover, the study tried to clearly define the construct of interest, develop valid measures that operationalize defined constructs as well as conducted a pilot test.

Statistical Conclusion Validity: Since this specific study is quantitative, it is worth to consider the issue of statistical conclusion validity. Thus, the appropriate statistical testing such as frequency and chi-square tests for nominal scale variables and Spearman correlation for ordinal scale variables was carefully selected so that the conclusions derived using this statistical procedure were valid.

3.9.2 Validity of Measurement procedures

Face and Content validity: This study used research construct measures based on theoretical study which has been evaluated by experts in the field for its face validity.

Convergent validity: For the purpose of this study, convergent validity was established by comparing (Spearman's rho correlation) the observed values of one indicator of one construct with that of other indicators of the same construct. The result demonstrated similarity (or high correlation) between values of these indicators.

Discriminant validity: Spearman's rho correlation among all items between different constructs were well below the 0.90 threshold, suggesting that all items between different constructs were distinct from each other, providing discriminant validity evidence.

3.9.3 Reliability of the Questionnaires

Internal consistency reliability: Internal consistency reliability is a measure of consistency between different items of the same construct. This reliability can be estimated in terms of average inter-item correlation, average item-to-total correlation, or more commonly, Cronbach's alpha. Cronbach's alpha, a reliability measure designed by Lee Cronbach in 1951, factors in scale size in reliability estimation, calculated using the following formula: where **K** is the number of items in the measure, **St²** is the variance (square of standard deviation) of the observed total scores, and **Si²** is the observed variance for item *i*.

$$\alpha = \left(\frac{k}{k-1}\right) * \left(1 - \frac{\sum_{i=1}^k Si^2}{St^2}\right)$$

As stated by Nunnally (1967), the closer the reliability coefficient to 1.00 is the better. In general, reliabilities less than 0.60 are considered poor; those above 0.60 are considered to be acceptable. The alpha value for section two questions is identified and summarized in Table-3.3 as shown below.

Table 3.3. Alpha coefficient for section two of the Questionnaire

Reliability Statistics		
Research Constructs	Cronbach's Alpha	N of Items
Attitude toward packaging attributes	.836	9
Perceived food product quality	.660	3
Perceived food product value	.655	4
Brand preference	.642	3

Source: Research Questionnaire, 2014

3.10 Pilot test

Prior to the final draft of the questionnaire, a pilot test was carried out by 20 participants for the purpose of improving the questionnaire by identifying and eliminating potential problem. The main objective is to detect weakness in questionnaire design and instrumentation. Many aspects of the questionnaire has been tested, including question content, wording, sequence, form, layout and instruction. Feedback and comments from research advisor also taken into consideration.

After collecting the feedback, editing was done to correct the ambiguous wordings, leading questions and unclear format... etc., before mass distribution of the questionnaire.

3.11 Ethical Considerations

There are certain ethical protocols that have been followed by the researcher. The first is soliciting explicit consent from the respondents. This ensures that their participation to the study is not out of their own volition. The researcher also ensured that the respondents were aware of the objectives of the research and their contribution to its completion. One other ethical measure exercised by researcher is treating the respondents with respect and courtesy (Schutt, 2006). This was done so that the respondents will be at ease and are more likely to give candid responses to the questionnaire.

There were also ethical measures that have been followed in the data analysis. To ensure the integrity of data, the researcher checked the accuracy of encoding of the survey responses. This was carried out to ensure that the statistics generated from the study are truthful and verifiable (Schutt, 2006).

CHAPTER-FOUR: RESEARCH RESULTS AND INTERPRETATION

4.1 Introduction

As indicated in the preceding chapters, this study attempted to identify the important elements of food packaging and to examine relationship between attitude toward packaging attributes and perceived food product quality, value and brand preference. A total of 300 questionnaires were distributed to AAU business school students at FBE campus and 279 (93%) useable questionnaires were obtained valid and used for analysis. Respondents were brought together at a common place and time, and each respondent is asked to complete the survey questionnaire independently without interacting with each other. The data collected were analyzed, interpreted and presented based on the results computed using SPSS v.21 software/tool.

Research results are presented in following order: at first, the importance of various visual and verbal elements of package that affect consumer's fruit juice preference is presented; second, results showing the effect of consumer's involvement level, time pressure and individual characteristics on consumer's attitudes toward package is presented; third, the relationship of consumers' attitude towards packaging attributes with perceived quality, value and brand preference is presented.

4.2 Important elements of food product packaging

Pursuing the aim of this paper, a separate analysis of the importance of visual and verbal elements of fruit juice package let the study maintain the following results. The frequency table and illustration of the results of this analysis is presented in Table 4.1 & Figure 4.1 respectively.

Table 4.1. Important elements of fruit juice packaging when participants have enough time

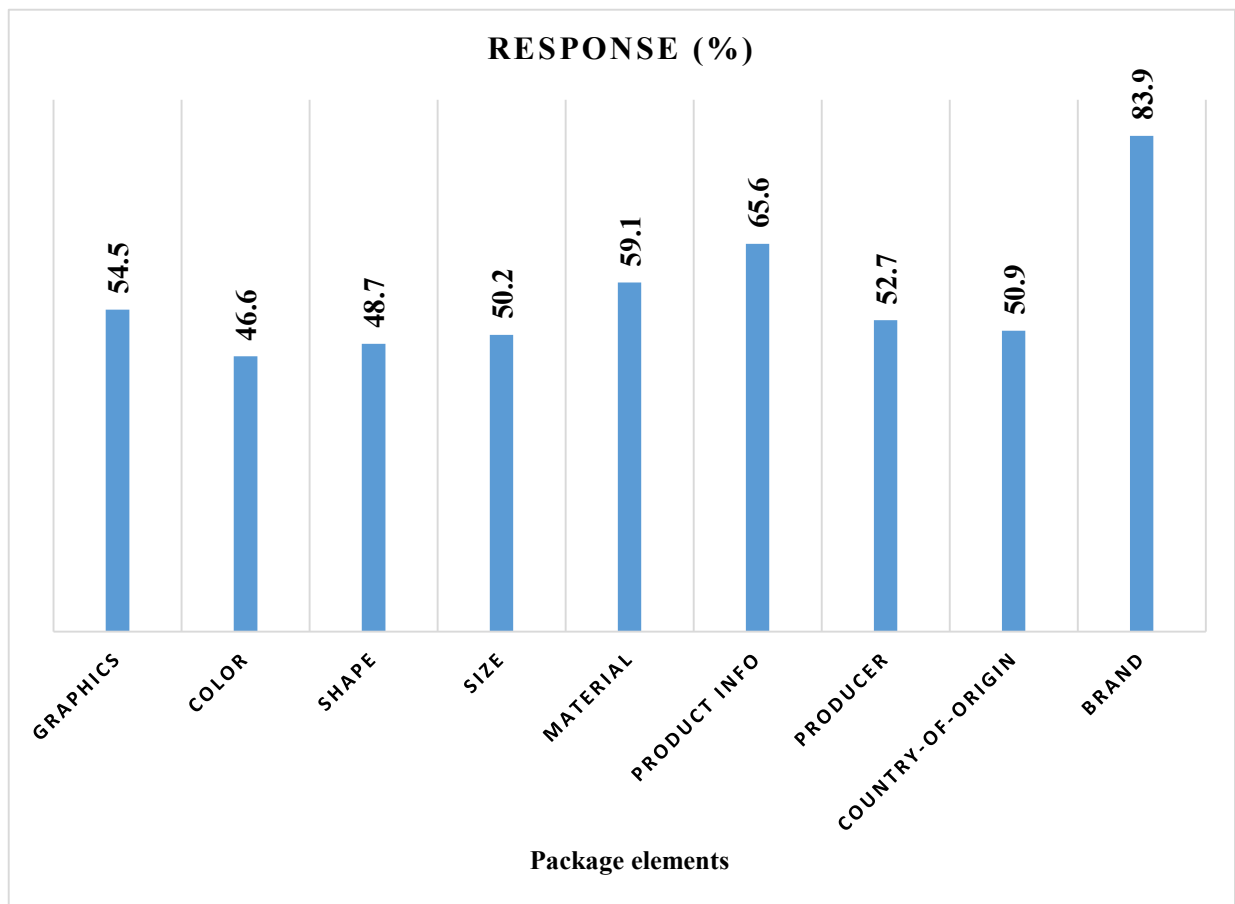
Response Frequency Table						
	Package elements		Frequency	Percent	Total Participants	
	Visual elements	Graphics	Important	152	54.5%	279
Unimportant			127	45.5%		
Color		Important	130	46.6%	279	
		Unimportant	149	53.4%		
Shape		Important	136	48.7%	279	
		Unimportant	143	51.3%		
Size		Important	140	50.2%	279	
		Unimportant	139	49.8%		
Material		Important	165	59.1%	279	
		Unimportant	114	40.9%		
Verbal elements		Product Information	Important	183	65.6%	279
			Unimportant	96	34.4%	
	Producer	Important	147	52.7%	279	
		Unimportant	132	47.3%		
	Country-of-origin	Important	142	50.9%	279	
		Unimportant	137	49.1%		
	Brand	Important	234	83.9%	279	
		Unimportant	45	16.1%		

Source: Research Questionnaire, 2014

According to table 4.1, it can be said that most of the participants are interested in visual package elements such as graphics (54.5%), package size (50.2%) and package material (59.1%). On the other hand, analyzing the importance of verbal elements, it could be stated that product information (65.6%), producer (52.7%), country-of-origin (50.9%) and brand name (83.9%) are

the most important elements; whereas, in this case color (46.6%) and shape (48.7%) could be treated as unimportant elements of package. Furthermore, the highest frequency is brand 234 (83.9%) thus, it can be said that brand name is the most important verbal element when consumers are evaluating fruit juice package.

Figure 4.1. Important elements of fruit juice packaging when participants have enough time



Source: Research Questionnaire, 2014

Comparing the results of visual and verbal elements of package, it could be stated that all the verbal elements are important package elements; on the other side, graphics, size and material are the important visual elements of package when consumers are evaluating packed fruit juice

products in a normal condition (enough time). This result is in agreement with previous findings of other researchers on this area Turner (1995) reported that people take note of food labels more than is generally thought. Some consumers are paying more attention to label information, as they become more concerned about health and nutrition (Coulson, 2000). Silayoi & Speece (2004); Kuyvkaite (2009) reported that due to changing life style of consumers to healthy eating, consumer's use of label information increased now a days, but they would like it if simplified.

4.3 Effect of time pressure, involvement level and individual characteristics

According to the research model developed in Fig 2.2A, the importance of package elements depending on time pressure, consumer's involvement level and participants' individual characteristics were analyzed and presented as follows.

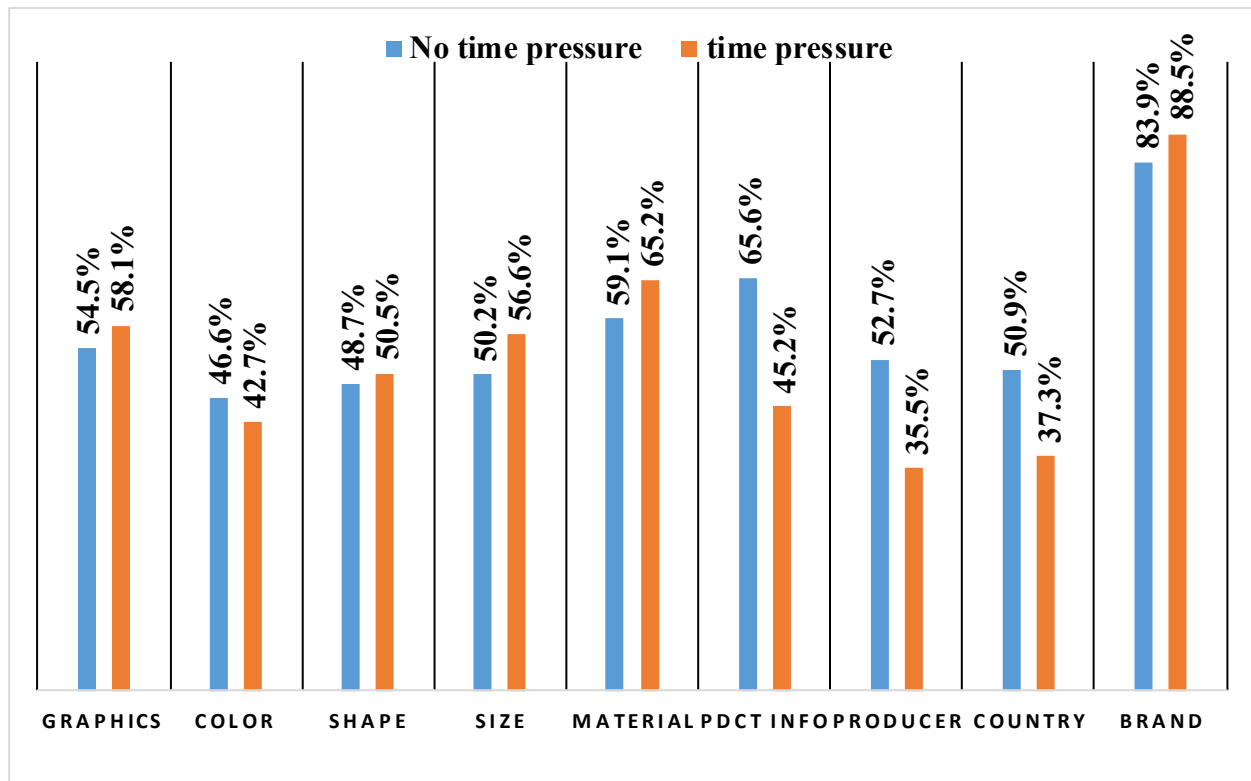
4.3.1 The importance of package elements depending on Time Pressure

In order to see the change in participant response when they evaluate fruit juice package under time pressure, an effort was made to compare the results with participants response under normal condition i.e., their response on packaging attributes when they have enough time.

In addition, the Pearson chi-square test was computed to check if there is any association between time pressure and the importance of food product package elements. According to (Andy, F., 2001), if we want to look at the relationship between two categorical variables then we can't use the mean or any similar statistic because we don't have any variables that have been measured continuously rather we analyze frequencies. Thus, the appropriate method to measure the relationship when we have categorical or nominal data is chi-square. The results of

contingency table of their response is shown in *Appendix B*; below is Figure 4.2, showing bar chart extracted from the contingency table result.

Figure 4.2. Important elements of fruit juice package depending on Time pressure.



Source: Research Questionnaire, 2014

According to Figure 4.2, it was revealed that being under time pressure major part of respondents' interest is increased towards visual package elements such as graphics (54.1% to 58.1%), shape (48.7% to 50.5%), size (50.2% to 56.6%) and material (59.1% to 65.2%), except color which show a slight decrease (46.6% to 42.7%). On the other hand, participants' interest for the verbal elements relatively decreased (product information from 65.5% to 45.2%, producer 52.7% to 35.5%, and country-of-origin 50.9% to 37.3%); in this case brand (83.9% to 88.5%) is exception. This result corresponds to the results of theoretical studies and to the assumption that

when consumer experiences lack of time the visual elements come to the front, because at that point consumers haven't enough time for studying information (Rita Kuyvkaite, 2009). However, respondents showed a great interest for brand (the largest frequency (88.5%)) when they experience lack of time. It contradicts to the results of theoretical studies and to the assumption that when consumers experience lack of time the visual elements come to the front, because at that point consumers haven't enough time for studying information (Silayoi & Speece (2004), Butkeviciene et al. (2008)). Such the results may be affected by decision to include a brand in the block of verbal elements of package. Inherently, brand could be treated being visual element as well as verbal. These results should be taken into consideration for other researches in this field. On the other hand, such results correspond to Kuyvkaite (2009); Young (2006) proposition about the effect of brand when judging the impact of packaging on consumer's purchase decision.

Table 4.2. Chi square results for Time pressure and Elements of package

<i>Package elements</i>		<i>χ^2</i>	<i>Df</i>	<i>Sig. (2-sided)</i>
<i>Visual elements</i>	Graphics	.831	1	.362
	Color	2.528	1	.112
	Shape	.092	1	.761
	Size	.030	1	.862
	Material	.122	1	.727
<i>Verbal elements</i>	Product Information	49.008	1	.000
	Producer information	4.183	1	.041
	Country-of-origin	.070	1	.791
	Brand	.352	1	.553

Source: Research Questionnaire, 2014

According to table-4.2, only product information and producer $p < \alpha.05$ has statistically significant association with time pressure i.e., when participants lack time they tend to decrease interest for these (Product and producer information) package elements. For all other package elements $p > \alpha.05$, the result shows that the main hypothesis stated there is statistically significant association between time pressure and these package elements (graphics, color, size, shape, material, country-of-origin and brand) could be rejected. This indicates that even though there is a variation in participants' response, the variation is created by chance suggesting whether there is time pressure or not, there is no difference in participants' interest for these package elements.

4.3.2 The importance of package elements depending on Involvement Level

Analyzing the importance of package elements depending on the involvement level, at first, involvement level of respondents were determined. Secondly, Pearson chi-square test was computed for the purpose of determining the association between these two categorical variables i.e., involvement level and package elements. Below are Table 4.3 & 4.4, showing summary of frequency of the participants' involvement level and chi square test respectively. The results of the investigation of the importance of elements of package depending on the consumer's level of involvement are presented in *Appendix C*.

Table 4.3. Frequency table for Involvement level of participants

<i>Frequency table of Respondent's Involvement level</i>			
Respondent's involvement		Frequency	Percent
Valid	High involvement	111	39.8%
	Low involvement	168	60.2%
	Total	279	100%

Source: Research Questionnaire, 2014

From the Table 4.3, Research results revealed that 168 (60.2%) of participants could be treated as “low involved”; whereas the remaining 111 (39.8%) could be treated as “high involved” when they evaluate fruit juice packages.

Table 4.4. Chi square results for Involvement level and Elements of package

Package elements		χ^2	Df	Sig. (2-sided)
Visual elements	Graphics	1.843a	1	.175
	Color	36.742	1	.000
	Shape	31.975	1	.000
	Size	1.944	1	.163
	Material	.433	1	.510
Verbal elements	Product Information	.961	1	.327
	Producer information	.132	1	.716
	Country-of-origin	1.215	1	.270
	Brand	.001	1	.974

Source: Research Questionnaire, 2014

Referring to Table 4.4, the chi square test result for color is $\chi^2=36.7, p < \alpha .05$ and for shape is $\chi^2=31.9, p < \alpha .05$. This result indicates that there is statistically significant association between involvement level and these visual elements (color and shape), which means, low involved participants show more interest for visual elements such as color and shape ; whereas high involved showed less interest. Thus, this result corresponds with previous findings and the study’s initial assumption that visual elements of package have stronger effect on consumers when they are in the level of low involvement (Maiksteniene & Auruskeviciene (2008); Kuyvkaite (2009)). However, the chi-square result for all other elements is $p > \alpha .05$, which

indicates that the main hypothesis stated there is statistically significant association between involvement level and these visual elements could be rejected. This indicates that the variation occurred in all other elements are in random or by chance.

4.3.3 The importance of package elements depending on Individual Characteristics

Importance of package elements depending on Gender

The following result shows the association between individual characteristics of participants and package elements. Table 4.5 & 4.6 shows the summary of the frequency of individual characteristics and chi square test respectively. According to table-4.5, item-1 of the table indicates out of 279 respondents of the study, 63.4% are male and the rest 35.6% are female. By using chi-square test, analysis was made to see the effect of individual characteristics of participants (gender and age) on the importance of package elements. It was revealed that there are more similarities than differences among various groups of participants.

Table 4.5. *Frequency table for Individual characteristics of participants*

<i>Frequency table for individual characteristics</i>			
Individual Characteristics		Frequency	Percent
<i>Gender</i>	Male	177	63.4%
	Female	102	36.6%
	Total	279	100%
<i>Age</i>	18-28	147	52.7%
	29-39	76	27.2%
	40-50	47	16.8%
	Above 50	9	3.2%
	Total	279	100%

Source: *Research Questionnaire, 2014*

Analyzing the influence of gender on the importance of fruit juice package elements it was found out that the main hypothesis stated that there is statistically significant association between gender and package elements could be rejected because p-value for gender is $p > \alpha .05$ for all package elements.

Table 4.6. Chi square analysis for Gender and elements of fruit juice packaging

Package elements		χ^2	Df	Sig. (2-sided)
Visual elements	Graphics	.794	1	.373
	Color	.380	1	.538
	Shape	1.724	1	.189
	Size	.086	1	.769
	Material	.180	1	.671
Verbal elements	Product Information	1.149	1	.284
	Producer information	.658	1	.417
	Country-of-origin	.073	1	.787
	Brand	.034	1	.853

Source: Research Questionnaire, 2014

This shows that the variation between male and female was occurred by chance or in random. This result contradict with previous studies that suggested different genders process advertisements differently, and consequently respond to marketing communication efforts differently (Nysveen et al., 2005). Such results may be due to different factors such as cultural, human, lifestyle and the chosen product itself. Therefore, these results should be taken into consideration for other researches in this field.

Importance of package elements depending on Age

Referring to table-4.7, it is evident that the main hypothesis stated there is statistically significant association with age group and package elements could be rejected because p-value is $p > \alpha.05$ for all elements. The variations occurred between the age groups is by chance. Thus, the importance of package elements could not be affected by the age group of individuals.

Table 4.7. *Chi square analysis for Age and elements of fruit juice packaging*

Package elements		χ^2	df	Sig. (2-sided)
Visual elements	Graphics	5.797	3	.122
	Color	2.340	3	.505
	Shape	3.603	3	.308
	Size	5.278	3	.153
	Material	1.206	3	.752
Verbal elements	Product Information	7.491	3	.058
	Producer information	2.411	3	.492
	Country-of-origin	1.739	3	.628
	Brand	6.411	3	.093

Source: Research Questionnaire, 2014

This result contradicts with other researches, which concluded that there is significant association between age group and package elements Bloch (1995); Barber, Almanza & Donovan (2006); Silayoi & Speece (2007); Kuyvkaite (2009). This might be again due to other personality differences such as cultural context, lifestyle (e.g. income level) and the product characteristics, thus it is worth for other researchers to further investigate by taking into account these issues in detail.

In summary, the results of this study gave answers to the research question 1 and 2. The results revealed that both visual (graphics, size and material) and verbal (product information, producer, country-of-origin and brand) elements are important food package elements. Moreover, study results revealed the effects of time pressure, involvement level and individual characteristics. It can be said that when consumers are under time pressure, they tend to show less interest for the verbal package elements (product information and producer). On the other hand, high involved consumers tend to show more interest for visual food package attributes (color and shape). However, the study result showed that there is no statistically significant association between individual characteristics (gender and age) and package elements.

4.4 The relationship between attitude toward package attributes and perceived quality, value and brand preference

Introduction

In this section the results of the inferential statistics techniques used in the study are presented. In order to test the research hypothesis, the spearman correlation coefficient was calculated. Thus, based on the results obtained from the study analysis, conclusions are drawn with respect to each hypothesis generated for the research.

Non parametric Correlation

The spearman's correlation coefficient was computed for the purpose of determining the relationships between the variables. Spearman's correlation coefficient is appropriate method to measure the correlation when the data are measured at ordinal level (Andy, F., 2006). Correlations are the measure of the linear relationship between two variables. A correlation

coefficient has a value ranging from -1 to 1. Values that are closer to the absolute value of 1 indicate that there is a strong relationship between the variables being correlated whereas values closer to 0 indicates that there is little or no linear relationship. As described by Andy, F. (2006), the correlation is a commonly used measure of the size of an effect: values of ± 0.1 represent a small effect, ± 0.3 is a medium effect and ± 0.5 is a large effect.

Findings showed that all measures included in the analysis were reliable, and the correlations among all constructs were well below the 0.90 threshold, suggesting that all constructs were distinct from each other. Table-4.8 reports the descriptive research construct measure i.e., any correlations between measures.

Table 4.8. Research constructs statistics

Correlations						
Research Constructs			AdPd	PPQ	PPV	BP
Spearman's rho	AdPd	Correlation Coefficient	1.000			
		Sig. (2-tailed)	.			
		N	279			
	PPQ	Correlation Coefficient	.646**	1.000		
		Sig. (2-tailed)	.000	.		
		N	279	279		
	PPV	Correlation Coefficient		.537**	1.000	
		Sig. (2-tailed)		.000	.	
		N		279	279	
	BP	Correlation Coefficient	.446**	.400**	.576**	1.000
		Sig. (2-tailed)	.000	.000	.000	.
		N	279	279	279	279
**. Correlation is significant at the 0.01 level (2-tailed).						

Notes: *AdPd* = Attitude toward packaging attributes; *PPQ* = Perceived food product quality; *PPV* = Perceived food product value; *BP* = Brand preference

Source: Research Questionnaire, 2014

4.4.1 Correlation analysis between attitudes toward packaging attributes and brand preference

Spearman correlation was conducted to know the degree of relationship between AdPd and BP. The correlation analysis undertaken here assists to check the proposed hypothesis (*H1*) of the study. As shown in the table-4.8, there is significant positive relationship between Attitude toward packaging attributes and brand preference ($r = 0.446, p < \alpha.05$). The correlation was direct which means positive Attitude towards package attribute results in increasingly positive evaluations of food product/brands.

This indicates that consumers with positive attitudes toward a product package attributes are likely to prefer that specific product/brand than others. Thus, the result supports for the alternative hypothesis stated that there is a significant relationship between attitudes toward packaging attributes and brand preference.

4.4.2 Correlation analysis between attitudes toward packaging attributes and perceived food product quality

Spearman correlation for second hypothesis (*H2*) of the study, was conducted to know the degree of relationship between AdPd and PPQ. As shown in the table-4.8, there is significant positive relationship between Attitude toward packaging attributes and Perceived food product quality ($r = 0.646, p < \alpha.05$). The positive correlation means positive Attitude towards package attribute results in increasingly positive perception of food product/brands. Thus, it can be said that consumers with positive attitudes toward a product package attributes have a positive perception for that specific product/brand quality. Thus, the result supports for the alternative hypothesis

stated that there is a significant relationship between attitudes toward packaging attributes and perceived food product quality.

4.4.3 Correlation analysis between perceived food product quality and perceived food product value

In order to see the degree of relationship between PPQ and PPV, which is the third hypothesis (*H3*); Spearman correlation analysis was conducted again. As shown in the table-4.8, there is significant positive relationship between Attitude toward packaging attributes and Perceived food product quality ($r = 0.537$, $p < \alpha.05$). The positive correlation means positive perceived food product quality results in positive perception of food product value. In other words, consumers with positive perception about the product quality have positive perception about the product overall value for money. Thus, the result supports for the alternative hypothesis stated that there is a significant relationship between perceived food product quality and perceived food product value.

4.4.4 Correlation analysis between perceived food product quality and brand preference

Referring to table-4.8, Results of Spearman correlation for the fourth hypothesis (*H4*) of the study, shows there is significant positive relationship between Attitude toward packaging attributes and Perceived food product quality ($r = 0.400$, $p < \alpha.05$). This positive correlation indicates if consumers have a positive perception for food product quality, then this results in increasingly positive perception of food product/brands. Thus, it can be concluded that consumers with positive perception of food product quality tend to prefer the product/brand.

Thus, the result supports for the alternative hypothesis stated that there is a significant relationship between perceived food product quality and brand preference.

4.4.5 Correlation analysis between perceived food product value and brand preference

Finally, According to table-4.8, Spearman correlation for the fifth hypothesis (H6) of the study revealed that there is significant positive relationship between Perceived food product value and brand preference ($r = 0.446$, $p < \alpha.05$) indicating that a positive Perceived food product value results in increasingly positive perception of food product/brands. More specifically, consumers with positive perception for food product value tends to prefer the product/brand. Thus, the result supports for the alternative hypothesis stated that there is a significant relationship between Perceived food product value and Brand preference.

In conclusion, the study results revealed that consumer attitudes toward packaging attributes has a positive relationship with perceived food product quality and brand preference. The results are consistent with those of previous authors, who argued that visual packaging positively influences perceived quality and brand preference (Edward et al., 2013), and perceived product quality influences perceived product value (Snoj et al., 2004; Aurier and de Lanauze, 2011), as well as perceived value positively influences brand preference (Chiu et al., 2010; Hellier et al., 2003).

CHAPTER FIVE: CONCLUSION AND IMPLICATIONS

5.1 Introduction

This chapter presents a conclusion based on theory and analyzed data which will provide the answers to the research questions, stated in chapter one. Finally, implications for management, theory and further research will be provided.

5.2 Conclusion

Attempting to answer the research questions; results were provided and the conclusion addresses the following points. The first aim was to determine the important elements of fruit juice package

It was revealed that verbal elements are the most important elements of fruit juice package. For a major part of consumers' Graphics design, package size and packing material are the main visual elements, while product information, producer, country-of-origin and brand are the main verbal elements when evaluating fruit juice packages.

The research results revealed that when consumers are under time pressure their interest for the verbal elements such as product information and producer decrease but their interest for brand name, the verbal element has increased. This result contradict to theoretical studies (Silayoi & Speece (2004), Butkeviciene et al. (2008)) and to the assumption that when consumer experiences lack of time the visual elements are more important.

Results of analyzing the importance of package elements depending on level of involvement correspond with those of theoretical studies Maiksteniene & Auruskeviciene (2008), Kuyvkaite (2009) and can be stated that visual elements such as color and shape of food product package

have relatively stronger influence on consumer's purchasing when they are in the level of "low involvement", in opposite to those who are in the level of "high involvement". However, individual characteristics doesn't show any significant association with package elements which contradicts with previous theories of Bloch (1995), Barber, Almanza & Donovan (2006), Silayoi & Speece (2007), Kuyvkaite (2009).

The second research aim was to explore the relationship between attitude toward packaging attributes and perceived quality, value and brand preference.

In this study, the hierarchical relationship of packaging and perceived food product quality, perceived food product value, and brand preference was investigated. The study results revealed that attitudes toward packaging attributes has a direct and positive relationship with consumers' perceived food product quality and brand preference, but has indirect and positive relationship with food product value. Perceived food product quality also indirectly and positively related with brand preferences through product value. In summary, the results show that positive attitude towards packaging attributes generates positive product and brand evaluations.

5.3 Theoretical implications

The findings provide several insights into the relationship between packaging and perceived food product quality, perceived food product value, and brand preference in the food market. The results reveal that consumer attitudes toward packaging attributes have a direct relationship with perceived food product quality and brand preference. These findings suggest that in the food marketplace, positive attitudes toward packaging attributes generates consumers' perceived food product quality and brand preference.

In summary, this study contributes to the literature by increasing the understanding of the importance of both visual and verbal communication on food packaging and bridges the gap between packaging attributes and consumer behavior literature. It also provides theoretical insights into the relationship between packaging attributes and perceived product quality, perceived product value, and brand preference.

5.4 Managerial implications

Product packaging has been commonly used in communication strategy at the point of purchase. Investigating the importance of packaging attributes can enable food-market practitioners to understand the importance of packaging attributes in facilitating people's positive perception of a food product. Statistical results indicate the significant relationship between packaging attributes and perceived product quality and brand preference. Consumers possessing a positive attitude toward packaging tend to evaluate the product and brand positively.

Based on the findings of this study, food firms should consider packaging attributes as the core for their product development. In the current competitive market, food companies should design their product packaging appropriately to generate the high brand preference and emphasize factors such as graphics, color, shape, size, material, product information, producer, country-of-origin and brand name to gain opportunities for forming positive perceptions, such as product quality, product value, and brand preference.

5.5 Implications for further study

The present study has several delimitations. It focuses only the fruit juice package attributes. Future studies could focus on other product package designs and by extending the research to a national level to check if the findings point towards a cultural or a sub cultural context. Furthermore, Gender based difference in attitude towards packaging attributes across various income groups. Finally, this study shows that a positive attitude towards packaging attributes results in increasingly positive evaluations of food product/brands. However, the paper is positioned around the importance of food packaging attributes and goes little beyond detailing the broad impact of attitudes towards food packaging attributes. It would be of interest, for example, to explore some packaging features (for instance, color and brand) that influence value perceptions, the cognitive mechanisms by which they occur, and perhaps the conditions under which each feature does and does not influence consumer value perceptions and brand preferences. A greater understanding of packaging may help the firm create a more successful product.

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APPENDIX A: QUESTIONNAIRE

ADDIS ABABA UNIVERSITY
COLLEGE OF BUSINESS AND ECONOMICS
DEPARTMENT OF MANAGEMENT
MBA PROGRAM

Dear Sir/Madam

Dear Participants, I will be very thankful for your cooperation. This questionnaire is intended for research purpose. The topic of this questionnaire is ***THE RELATIONSHIP BETWEEN CONSUMERS' ATTITUDE TOWARDS PACKAGING ATTRIBUTES AND PERCIEVED FOOD PRODUCT QUALITY, VALUE AND BRAND PREFERENCE***. All the data collected will be kept in strict confidential and will be used for analysis of Master Thesis in management at Addis Ababa University. You may find statements are repetitive this is due to the nature of academic scaling, hence your patience is much appreciated.

DIRECTIONS:

- 1. This questionnaire focuses on Fruit Juice products only.**
- 2. In this questionnaire, packaging is a tool that communicates quality and value of products through its *VISUAL (graphics, color, size, shape and material)* and *VERBAL (product information, producer, country of origin and brand)* elements and thus generates consumer's brand preference.**

SECTION ONE: Answers require a tick in the boxes provided to indicate your appropriate responses.

Do you use packaged fruit juices? YES NO

Do you evaluate fruit juice products based on their packaging? YES NO

A. CONSUMER'S INDIVIDUAL CHARACTERISTICS

1. Sex A. Male B. Female

2. Age A. 18-28 B. 29-39 C. 40-50 D. 51 and above

B. CONSUMER'S LEVEL OF INVOLVEMENT

3. How do you see your level of involvement in evaluating the package when you buy fruit juices?

High involvement Low involvement

C. TIME PRESSURE

4. Which elements of fruit juice package do you consider important when you are evaluating fruit juice products/Brands if you have enough time? (*Tick as many as possible*)

Graphics	<input type="checkbox"/>	Product information	<input type="checkbox"/>
Color	<input type="checkbox"/>	Producer	<input type="checkbox"/>
Shape	<input type="checkbox"/>	Country-of-origin	<input type="checkbox"/>
Size	<input type="checkbox"/>	Brand	<input type="checkbox"/>
Packing Material	<input type="checkbox"/>		

5. Which elements of fruit juice package do you consider important when you are evaluating fruit juice products/Brands if you are in a hurry or under time pressure? (*Tick as many as possible*)

Graphics	<input type="checkbox"/>	Product information	<input type="checkbox"/>
Color	<input type="checkbox"/>	Producer	<input type="checkbox"/>
Shape	<input type="checkbox"/>	Country-of-origin	<input type="checkbox"/>
Size	<input type="checkbox"/>	Brand	<input type="checkbox"/>
Packing Material	<input type="checkbox"/>		

SECTION TWO: Answers require a circle on the numbers 1 up to 5 to indicate your appropriate responses.

RATING OF QUESTIONS

1	STRONGLY DISAGREE
2	DISAGREE
3	NEUTRAL
4	AGREE
5	STRONGLY AGREE

A. ATTITUDE TOWARD VISUAL AND VERBAL PACKAGING DESIGN

Q	Question	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1.	The graphics design of fruit juice package stimulates my product/brand preference.	1	2	3	4	5
2.	The color of fruit juice package stimulates my product/brand preference.	1	2	3	4	5
6.	The shape of fruit juice package stimulates my product/brand preference.	1	2	3	4	5
7.	The size of fruit juice package stimulates my product/brand preference.	1	2	3	4	5
8.	The material of fruit juice package stimulates my product/brand preference.	1	2	3	4	5
9.	Product information on fruit juice package stimulates my product/brand preference	1	2	3	4	5
10.	Producer information on fruit juice package stimulates my product/brand preference	1	2	3	4	5
11.	Country-of-origin on fruit juice package stimulates my product/brand preference	1	2	3	4	5
12.	Brand name on fruit juice package stimulates my brand preference	1	2	3	4	5

B. PERCEIVED FOOD PRODUCT QUALITY

13.	Fruit juice package design has a function of presenting the product as Superior.	1	2	3	4	5
14.	I see fruit juice package design as a tool that guarantee the quality of the product.	1	2	3	4	5
15.	The design of fruit juice package helps me to determine the product's overall quality.	1	2	3	4	5

C. PERCEIVED FOOD PRODUCT VALUE

16.	Fruit juice package helps me to assess the price is acceptability.	1	2	3	4	5
17.	It is generally worth it to pay more for fruit juice product with good packaging design.	1	2	3	4	5
18.	Fruit juice package design could make me to believe that the product can meet my expectation.	1	2	3	4	5
19.	The design of fruit juice package can enhance the product's overall value for money.	1	2	3	4	5

D. BRAND PREFERENCE

20.	The design of fruit juice package can increase my interest to buy the brand/product over other brands.	1	2	3	4	5
21.	The design of fruit juice package can increase my interest to use the brand/product over other brands.	1	2	3	4	5
22.	I prefer fruit juice brand/product over other brands if it has a better pack design.	1	2	3	4	5

THANK YOU FOR YOUR COOPERATION!

APPENDIX B: CONTINGENCY TABLE OF TIME PRESSURE & PACKAGE ELEMENTS

Time pressure Cross tabulation				
Package elements		Under time pressure		Total
		Important	Unimportant	
Graphics	Important	92	60	152
	Unimportant	70	57	127
Total		162	117	279
Color	Important	62	68	130
	Unimportant	57	92	149
Total		119	160	279
Shape	Important	70	66	136
	Unimportant	71	72	143
Total		141	138	279
Size	Important	80	60	140
	Unimportant	78	61	139
Total		158	121	279
Material	Important	109	56	165
	Unimportant	73	41	114
Total		182	97	279
Product information	Important	55	128	183
	Unimportant	71	25	96
Total		126	153	279
Producer	Important	44	103	147
	Unimportant	55	77	132
Total		99	180	279
Country-of-origin	Important	54	88	142
	Unimportant	50	87	137
Total		104	175	279
Brand	Important	206	28	234
	Unimportant	41	4	45
Total		247	32	279

APPENDIX C: CONTINGENCY TABLE OF INVOLVEMENT LEVEL & PACKAGE ELEMENTS

Involvement level * Package elements cross tabulation				
Package elements	Involvement level	Importance		Total
		Important	Unimportant	
Graphics	High involvement	66	45	111
	Low involvement	86	82	168
Total		152	127	279
Color	High involvement	27	84	111
	Low involvement	103	65	168
Total		130	149	279
Shape	High involvement	31	80	111
	Low involvement	105	63	168
Total		136	143	279
Size	High involvement	50	61	111
	Low involvement	90	78	168
Total		140	139	279
Material	High involvement	63	48	111
	Low involvement	102	66	168
Total		165	114	279
Product information	High involvement	69	42	111
	Low involvement	114	54	168
Total		183	96	279
Producer	High involvement	57	54	111
	Low involvement	90	78	168
Total		147	132	279
Country-of-origin	High involvement	61	50	111
	Low involvement	81	87	168
Total		142	137	279
Brand	High involvement	93	18	111
	Low involvement	141	27	168
Total		234	45	279